

The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1807.—Vol. XL.

LONDON, SATURDAY, APRIL 9, 1870.

(WITH SUPPLEMENT) (STAMPED ...SIXPENCE. UNSTAMPED...FIVEPENCE.)

MR. JAMES CROFTS, STOCK AND SHAREBROKER,
No. 1, FINCH LANE, CORNHILL.
(ESTABLISHED 1842.)

HOLDERS of mining shares DIFFICULT OF SALE in the open market may find purchasers for the same through Mr. CROFTS' agency. Also parties requiring advice how to act in the disposal or abandonment of doubtful mining stocks may profitably avail of Mr. CROFTS' long experience on the market in all cases of doubt or difficulty, legal or otherwise.

The continued rise in tin is creating an immense demand for shares in good tin mines. At the ROOCH CONSOLES TIN MINE (Roche, Cornwall), in 3000 shares, large returns can be made at a very low cost, whilst black tin is now nearly £80 per ton. The middle lode, which is now being driven upon, is 3 ft. wide, and worth 30 lbs. of tin to the ton of the lode, and only 6 fathoms from surface. The shares at present are only 10s., but they will shortly rise to at least double or treble this price. The mine is situated at the head of the celebrated Goss Moors, from which millions worth of tin have been raised.

Bankers: Metropolitan Bank.

MR. W. H. BUMPUS, STOCK AND SHAREDEALER,
44, THREADNEEDLE STREET, LONDON, E.C., has FOR SALE the following SHARES, free of commission:—

50 Anglo-Argen., £1 1/2.	20 Eclipse.	25 No. Trekerby, 15s 6d
10 Asheton, £2 1/2.	10 East Lovell, £2 1/2.	15 Pacific, £2 1/2.
25 Australian United, £2 1/2.	25 East Grenville, £2 1/2.	25 Pen' Allt, £2 1/2.
10 Anglo-Austra., 20s.	10 East Caradon, £2 1/2.	50 Pastorena, £1 1/2. 6d.
10 Anglo-Brazilian, £2 1/2.	75 Frontino, 18s. call pd	20 Prince of Wales, 16s 3d
15 Bwch Consols, £2 1/2.	25 Frank Mills, £2 1/2.	50 Port Phillip, 15s. 6d.
20 Bronfloyd, £4 1s. 3d.	75 Great Western, £2 1/2.	50 Spear Moor, £2 1/2.
20 Chontales, £1 1/2.	60 Gen. Brazilian, 18s.	100 Taquaril, 8s 6d prem.
35 Carn Camborne, 18s 9d	10 Great Laxey, £1 1/2.	10 Tankerville, £1 1/2.
30 Caegnyon, £2 1/2.	35 Gt. No. Laxey, 12s 9d	20 Tan-yr-Alit, £2 1/2.
15 Cape Copper, £2 1/2.	20 Gnamena, 4s.	50 Van Consols, £2 1/2.
2 Devon Consols, £10 1/2.	10 Great Vor, £2 1/2.	20 W. Tankerville, £2 1/2.
25 Don Pedro, £4 1/2. x div	50 Holmbush and Kelly, £2 1/2.	100 West Maria, £2 1/2. 9d
50 Drake Walls, 27s.	Bray, 28s. 9d.	50 West Pant-y-go, 15s.
	10 Marke Valley, £2 1/2.	50 West Godolphin, 12s.

BUYER of Great Laxey at £1 1/2.

MR. WILLIAM WARD,
95, BISHOPSGATE STREET WITHIN, LONDON, E.C.

JOHN RISLEY, (SWORN) STOCK AND SHAREBROKER,
48, THREADNEEDLE STREET, LONDON, E.C.
Bankers: London and Westminster, Lothbury.

MR. Y. CHRISTIAN, STOCK AND SHAREDEALER,
11, ROYAL EXCHANGE, E.C.
Bankers: Bank of England.

MR. T. A. MUNDY, STOCK AND SHAREDEALER,
35, BISHOPSGATE STREET WITHIN, E.C.
Bankers: City Bank.

MR. JOHN MOSS, STOCK AND SHAREDEALER,
ST. MICHAEL'S CHAMBERS, 42, CORNHILL, E.C.
Bankers: City Bank, Finch-lane, E.C.

MR. J. B. REYNOLDS, STOCK AND SHAREDEALER,
70 AND 71, BISHOPSGATE STREET WITHIN, LONDON, E.C.
Bankers: City Bank.

MR. EDWARD JONES, 19, GREAT ST. HELEN'S,
LONDON, E.C., STOCK AND SHAREDEALER.
Business transacted for cash or the fortnightly settlement in all Stocks and Shares; and Special Business in Providence, Great Vor, West Chiverton, Budnik Consols, East Lovell, Devon Great Consols, East Bottle Hill, Frontino and Bolivia, Pastorena United, Chontales, and Australian United.
Money advanced on marketable shares to any amount.

WALTER TREGELLAS, 122, BISHOPSGATE STREET WITHIN, LONDON, E.C., DEALER in all descriptions of ENGLISH and FOREIGN SECURITIES, either for immediate cash or the fortnightly settlement.
W. T. is always prepared to do business in the shares of the Brazilian Gold Mines, which, from long experience, he is well acquainted with.
Taquaril shares are a first-class investment; also Eclipse, California.

Twenty-five Years' Experience.

MR. F. W. MANSELL, STOCK AND SHAREDEALER,
1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C., has the following SHARES FOR SALE, for cash or account, at net prices:—

150 Anglo-Brazil., 9s. 3d.	50 Don Pedro, £4 12s 6d.	50 Pacific, £2.
20 Asheton, £2.	15 East Lovell, £2 1/2.	50 Pen' Allt, £2 1/2.
25 Bronfloyd, £2 1/2.	30 East Chiverton, 20s.	50 Trumpet Con., £2 1/2.
25 Bwch Consols, £2 1/2.	50 East Seton, 27s. 6d.	35 Tan-yr-Alit, £2 1/2.
10 Bwadrain Con., £2 1/2.	150 Frontino, 18s. 6d.	50 Van Consols, £2 1/2.
10 Chiverton Val., £4 1/2.	15 Great Vor, £2 1/2.	5 Van, £20.
75 Chontales, £1 1/2.	5 Great Laxey, £1 1/2.	50 Wt. Tankerville, £2 1/2.
15 Carn Camborne, 17s 6d	100 Gen. Brazilian, 17s 6d	20 Wheel Ida, 5s.
10 Drake Walls, 25s.	3 Nanglies, £2 1/2.	100 West Maria, £2 1/2.
1 Devon Cons., £10 1/2.	50 No. Trekerby, 14s	3 Wheel Jane, £46.
	20 New Lovell, £2.	

Daily Price List published every evening in time for post (free).
Bankers: London Joint-Stock Bank.

MESSRS. J. HUME AND CO., STOCK AND SHAREDEALERS,
74, OLD BROAD STREET, LONDON, E.C., have BUSINESS in:—

20 Tan-yr-Alit.	5 West Chiverton.	50 West Stiperstones.
20 Asheton.	20 New Lovell.	10 East Lovell.
20 Pen' Allt.	20 West Maria.	10 Marke Valley.
50 Caegnyon.	20 Van Consols.	20 Pacific.
	50 West Tankerville.	

A BUYER of West Pant-y-go, West Tankerville, West Stiperstones, and Tan-kerena. Orders negotiated by telegram for cash or account. Commission 1/4 per cent.
An "Investment Record and Mining Review" free to clients, or per post 6d. per copy.
Bankers: The London Joint-Stock Bank.

MR. WILLIAM MARLBOROUGH, 1, GREAT ST. HELEN'S,
BISHOPSGATE STREET, LONDON, E.C. (Established 15 years), has FOR SALE the following SHARES, at net prices:—

25 Aberdaunt, £2 1/2.	5 East Lovell, £2 1/2. 9d	50 Port Phillip, 15s. 9d.
10 Asheton, £2 1/2.	100 Excelsior, 4s. 6d.	50 Pastorena, 23s.
50 Anglo-Argen., 22s 6d	5 Great Rock, £2.	25 Prince of Wales, 16s 9d
20 Australian United, 15s. 9d. prem.	5 Great Laxey, £1 1/2.	2 Providence, £2 1/2.
20 Bwch Cons., £3 14s.	20 Gwydyr Park, 13s. 9d	100 Perran Cons., 17s. 9d.
20 Bronfloyd, £4 3s.	50 Gen. Brazil., 3s 3d pm.	50 Rhydallog, £2 1/2.
40 Bwadrain Con., 40s.	50 Gt. Retallack, 19s. 3d.	50 Sweetland Creek, 8s 9d
25 Chontales, 23s.	50 Great Vor, £2 1/2.	50 Tan-yr-Alit, £2 1/2.
25 Chiverton, 44s. 9d.	20 Great Royalton, 12s.	5 St. John del Rey, £2 1/2.
10 Chiv. Valley, £4 10s 3d	10 Gt. So. Chiverton, 15s	50 Tan-yr-Alit, £2 1/2.
30 Calbeck Fells, 27s.	10 Hammett, £2 1/2.	50 Tankerville, £2 1/2.
10 Chiv. Moor, 5s 8s 9d	50 Hington, 17s. 6d.	50 Taquaril, 8s. 3d. pm.
20 Cefn Consols.	40 Holmbush and Kelly, £2 1/2.	3 Van, £27.
50 Drake Walls, 26s. 9d.	Bray, 17s. 9d.	25 Van Consols, £3 13s 6d
20 Don Pedro, £5 17s pm.	20 Lovell Cons. (offer wtd.)	5 Wh. Kitty (Leland), £13 1/2.
50 Prince of Wales, £5 10s.	20 Mark Valley, £3 18s.	5 Wh. Kitty (St. Agnes), £2 1/2.
3 Ding Dong, £1 1/2.	25 North Croft, £2 1/2.	50 West Maria, 47s. 6d.
100 Eclipse, 2s. 3d. pm.	5 North Roskar, £2.	
20 East Bottle Hill, 15s.	20 New Lovell, 43s. 9d.	
	20 Pacific, £2 13s. 9d.	

HAMMETT.—A very important discovery has been made at this mine, and the shares should be immediately secured.

MR. GEORGE BUDGE, STOCK AND SHAREDEALER,
No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 21 years), is a SELLER at net prices of:—

100 East Grenville; 2 Minera; 90 Redmoor; 10 Tankerville; 50 West Tankerville; 15 Asheton; 1 Devon Consols; 75 Bwadrain Consols; 32 Hammett; 40 Wilec Agar; 50 Gwydyr Park; 15 Tan-yr-Alit; 30 Van Consols; 40 Calbeck Fells; 25 Hington Down; 50 Merilyn; 30 Bwch Consols; 15 Great Rock; 50 Prince of Wales; 5 Nanglies; 70 New Crown Hill; 40 Wheel Trelawny, 9s. 9d.; 50 Polbreen; 10 North Croft; 50 Cefn Consols; 5 Great Laxey; 50 Aberdaunt; 200 Worthing; 100 Anglo-Brazilian; 80 Anglo-Italian; 150 New Quebrada; and 30 United Mexican.

Mr. BUDGE advises investors to secure an interest in Bwadrain Consols. There were sold on the 31st ult. 40 tons of silver-lead ore.

CORNISH AND WELSH (LEAD) MINES—
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PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST—SYNOPSIS OF CORNISH AND DEVON MINES," of Friday, April 8, No. 579, Vol. XII., price 6d. each copy, forwarded on application, contains information on the following mines:—

Tankerville.	Great Laxey.	Great Wheel Vor.
North Croft.	Drake Walls.	East Wheel Lovell.
West Caradon.	East Wheel Seton.	

And full particulars of West Tankerville Mine, and important information on the Tin Trade, &c.

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MR. EDWARD COOKE,
STOCK AND MINING SHAREDEALER, 76, OLD BROAD STREET
(and Mining Exchange), LONDON, E.C.

TANKERVILLE.—This mine having been so fully reported on by the manager, Captain Arthur Waters, I need make no further reference to its merits than to refer my friends to an attentive perusal of same. I strongly advise an immediate purchase of those shares, feeling confident they will still have a great rise in price.
WEST TANKERVILLE should also be bought at once.
Bankers: Alliance Bank.

MR. JAMES STOCKER, STOCK AND SHAREDEALER,
31, THREADNEEDLE STREET (and Mining Exchange),
LONDON, E.C.
Bankers: London and Westminster, Lothbury.

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We are prepared to negotiate the Purchase or Sale of Stocks and Shares in Consols, Foreign Bonds, Railways, Insurance, Banks, Gas, Mining, and other Financial Companies. BUSINESS in the following shares:—

Asheton.	Great Rock.	Chontales.
Bronfloyd.	Nanteos Consols.	Frontino.
Calbeck Fells.	Van.	East Lovell.
Cardigan Bay Consols.	Van Consols.	New Lovell.
South Cardigan.	West Maria.	Tan-yr-Alit.
Cefn Consols.	Wh. Kitty (St. Agnes).	Tankerville.
Drake Walls.	Wheel Seton.	Pen' Allt.
Don Pedro.	St. John del Rey.	
Crown Quarry.	Morben.	Cwmebol.
		Apperley.

CARDIGAN BAY CONSOLS (Silver-Lead and Blende).—We again repeat that this will be one of the great prizes of the year. Shares should be at once secured.

SOUTH CARDIGAN.—We recommend the immediate purchase of these shares.
FRANK LIMMER, Secretary.

MR. J. B. HAWKES, STOCK AND SHAREDEALER,
2, CROWN COURT, THREADNEEDLE STREET, E.C., TRANSACTS BUSINESS in all Stocks, Shares, and Miscellaneous Securities at close market prices. Reliable information furnished respecting the principal Cornish and Welsh Mines.

Mr. J. B. HAWKES has FOR SALE the following shares:—

50 Anglo-Argen., 22s. 6d	50 Gen. Brazil., 3s 3d pm.	5 Tankerville, £1 1/2.
10 Asheton, £2 1/2.	5 Gt. Laxey, £1 1/2.	10 Tan-yr-Alit, £2 1/2.
50 Drake Walls, 26s. 9d.	20 New Lovell, 44s.	2 V. Lovell, £27.
5 E. Lovell, £2 1/2. 9d.	50 Gt. Retallack, 19s. 3d	20 Van Cons., £3 13s. 6d.

MR. HENRY MANSELL, STOCK AND SHAREDEALER,
1, PINNER'S COURT, OLD BROAD STREET, LONDON, has FOR SALE, at net prices, for cash, the following shares:—

100 Pastorena, £1 3s. 9d.	5 Cefn Consols, £2.	3 Devon Cons., £10 1/2.
50 Van United, (£1 pd.), 10s.	200 Virtuous Lady (or any part of same), £1 12s. 6d.	20 Bwch Cons., £3 16s 3d
50 Nanteos Cons. (fully paid), 10s.	20 Tankerville, £1 1/2.	50 Pen' Allt, £2.
200 Prince of Wales, 15s 6d	10 Great Rock, £7 7s. 6d.	100 West Pant-y-go, 16s 3d
10 Lwernog (fully pd.), £2.	20 Asheton, £3 7s. 6d.	50 Princess of Wales, £2 1/2.
25 East Lovell, £2 1/2.	50 Bronfloyd, £2 1/2.	10 Great Vor, £1 1/2.
100 Excelsior.	50 Holmbush and Kelly, £2 1/2.	50 North Croft, £2 1/2.
10 Caegnyon, £3.	Bray (offer wtd.), 14s.	102 No. Trekerby, 14s.
50 Hammett, £4 13s 9d.	25 Hammett, £4 13s 9d.	10 Great So. Chiverton (offer wanted).
BUYER of any part of 300 Van Consols, at £2 12s. 6d.; 50 West Maria and Fortescue, £2 11s. 3d.; 200 Rosewall Hill and Ransom United, £1 2s. 3d.; and 30 Kitty (St. Agnes), £2 1/2.		

EXCELSIOR TIN AND COPPER MINE.—Mr. HENRY MANSELL still recommends the purchase of these shares, as likely for a rise of some hundreds per cent. during the present year. Copies of Mr. J. H. Hitchens' recent report can be had on application to the above address, where also specimens of the ore discovered, plans of the mine, &c., can be seen.

References exchanged.
Bankers: London Joint-Stock Bank.

MR. E. J. BARTLETT, STOCK AND SHAREDEALER,
No. 30, GREAT ST. HELEN'S, LONDON, E.C., transacts business at net prices in every description of security.

SPECIAL BUSINESS in West Tankerville, Tankerville, Nanteos, Great Western, Calbeck Fells, East Seton, Frank Mills, North Pool, Wheel Agar, and New Lovell shares.

MR. THOMAS THOMPSON, STOCK AND SHAREDEALER,
AND MINE AGENT,
12, OLD JEWRY CHAMBERS, LONDON, E.C.

MR. THOMPSON being in communication with some of the most experienced miners in Wales, is in a position to afford reliable information to those seeking investments in the lead mines of the Principality.

The investing public should not forget the severe lesson taught by the late panic, that Stock Exchange prices by no means represent the intrinsic or permanent value of any property.

MR. THOMPSON recommends the purchase of NEW CENTRAL SNAILBEACH shares, as this mine will become the most valuable property in the district; also of LLANIDLOES WHEAL VAN.

Advantage should be taken of the late fall in PACIFIC shares, which should be bought, together with SWEETLAND CREEK.

Free on application a few remarks on "Mining in the Llanidloes (Van) district," also on "The Science of Investments."

MR. CHARLES THOMAS,
MINING AGENT, AND GENERAL SHAREDEALER,
3, GREAT ST. HELEN'S, LONDON, E.C.

MESSRS. WOODHOUSE AND CO., 416, STRAND, LONDON,
E.C., have FOR SALE the following shares at net prices:—

50 Aberdaunt, £2.	25 Drake Walls, £2 1/2.	10 Pen' Allt.
50 Anglo-Argen., 3-16ths prem.	5 East Lovell, £2 1/2.	10 Pacific, £2 1/2.
10 Asheton, £2.	15 East Seton.	10 Penryn, £2 1/2.
25 Bwch Consols, £3 13s	10 Great Laxey, £1 1/2.	50 Rhydallog.
30 Bronfloyd, £4 1s. 3d.	5 Great Vor, £1 1/2.	20 Tankerville, £1 1/2.
10 Caegnyon, 1/4 prem.	5 Great Rock, £2.	10 Tan-yr-Alit, £2 1/2.
30 Cefn Consols.	10 Hammett.	50 Taquaril, 1/4 pm.
40 Don Pedro, £3 3/4 pm.	2 Minera, £172.	4 Van, £27.
1 Devon Consols, £10 1/2.	50 Nanteos Cons., 18s 6d	50 Van Consols, £2 1/2.
2 Dolcoath, £18 1/2.	10 North Levant.	15 West Maria, £2 1/2.
	15 New Lovell, £2 1/2.	3 W. Wh. Seton, £134.
	35 No. Trekerby, 15s.	

Messrs. WOODHOUSE advise the purchase of the following shares for an early rise—Tankerville, Nanteos Consols, Rhydallog, and Cefn Consols.

MR. JOHN GIBBS, STOCK AND SHAREDEALER,
51, THREADNEEDLE STREET, LONDON, E.C.
All kinds of shares bought and sold at closest market prices.
Bankers: London and County Bank.

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Our long experience has taught us to deal with caution. We act accordingly. Investors can make money, and for safety they should do their business only through us.

BUSINESS in the following shares at net prices:—

25 Aberdaunt.	50 Don Pedro, £4 13s. 9d	100 Holmbush and Kelly
100 Anglo-Brazilian, 11s.	3 Dolcoath.	Bray, 22s. 6d.
15 Asheton.	50 Felipse.	25 No. Trekerby, 13s 6d
20 Bronfloyd, £2 1/2.	10 East Caradon, £2 1/2.	25 Prince of Wales, 16s 2d
40 Bwadrain Con., 42s 6d	15 East Lovell.	50 Terras, 25s., fully pd
15 Bwch Con., £3 13s 9d	100 Excelsior, 4s. 9d.	15 Tan-yr-Alit, £2 1/2.
60 Brynpostig, 25s. 6d.	10 Great Laxey, £1 1/2.	100 Great Royalton, 16s.
20 Calbeck Fells, 27s 6d	10 Great Rock, £2 1/2.	50 Tamar Valley, offer wanted.
10 Chiverton Moor, £2 1/2.	50 Gen. Brazil., £2 1/2. pm.	
40 Chontales, £2 1/2. 9d.	50 Hammett.	

WANTED TO BUY—750 shares (fully paid) in the Terras Tin Mining Company (Limited). State lowest price net cash.

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MR. C. A. POWELL, BRITISH AND FOREIGN STOCK AND SHAREDEALER,
No. 1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C.

BUSINESS as BUYER or SELLER in all shares currently dealt in.

Telegrams promptly attended to.

References exchanged.

Pacific, Bwch, West Pant-y-go, Van, Pen' Allt, Tan-yr-Alit, Asheton, Frontino, and Brynpostig.

MR. POWELL has Special Business in the above.

Bankers: City Bank, Finch-lane.

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 Straight and Cranked Axes, Wheels and Axles, Railway Chairs, Fish Plates,
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 Angle, Tee, and Girder Iron, Nail Rode, Tin Plates, Hcops, Sheets, Lead,
 Copper, Tin, Zinc, and Spelter.
 Hot and Cold Blast Pig Iron, &c., &c.

WARTON NATIVE OXIDE OF IRON
 IS SUPERIOR TO ANY OTHER PAINT IN
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 AND, UNLIKE LEAD PIGMENTS,
 IS INNOCUOUS TO THE WORKMEN USING IT.
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 THIS INDICATOR, in addition to its ordinary use, INDICATES
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 ESTABLISHED 1847.
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 MANUFACTURERS OF RAILWAY CARRIAGES AND WAGONS, AND EVERY
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RAILWAY WAGONS FOR HIRE.
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 MANUFACTURE RAILWAY WAGONS OF EVERY DESCRIPTION, FOR
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 for hire capable of carrying 6, 8, and 10 tons, part of which are constructed
 specially for shipping purposes. Wagons in working order maintained by contract.
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Just published, price 1s., by post 1s. 1d.,
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 Price 4d.; from H. C. CROFTS, Chatham.
 Some of the new lead (2 1/2 cwt) mines are "specially hazardous."

INVESTMENTS IN LEAD MINES.—
 THE DIVIDENDS paid by LEAD MINES for the year have DOUBLED IN
 AMOUNT in the last ten years, and are likely to continue to increase. Some of
 the young lead mines will probably become profitable, and rise greatly in value
 in a short time. Full particulars, with a MAP of the Cardiganshire and Moun-
 tgomeryshire districts (including Van, Dyffell, Plynlimmon, East Darren, South
 Darren, Lisburne, Cwmystwith, Cefn Brynno, and other mines), can be obtained
 price 1s. on application to J. H. MURCHISON, Esq., No. 8, Austin Friars, Lon-
 don, E.C.

ST. AGNES MINING DISTRICT.
A MAP of ALL THE MINES in the parish of ST. AGNES,
 CORNWALL, is ready for delivery.
 Orders received by the authors, B. SYMONS and SOX, Surveyors and Litho-
 graphers, Truro. Price, 21s., mounted.

Every Wednesday, price 4d.; in monthly parts, 1s. 6d.; yearly subscription,
 (including postage), 17s. 6d.

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 attractive department of each number, and under the heading of Answers to
 Correspondents, editorial solutions of difficult questions, &c., can be found.
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The Teign Valley Lead and Barytes

MINING COMPANY (LIMITED), BRIDFORD, DEVON.

Incorporated under the Companies Acts, 1862 and 1867.

CAPITAL £20,000, IN 4000 SHARES OF £5 EACH.

Deposit, 10s. per share, and 10s. on allotment.

Calls not to exceed 10s. per share, at intervals of not less than three months.

DIRECTORS.

Sir LAWRENCE PALK, Bart., M.P., Haldon House, Devon.

E. BRYDGES WILLYAMS, Esq., M.P., Nanckivell, Cornwall.

Col. BRENT (Director of the London and South-Western Railway Company), Woodbury, Det

R. T. HEAD, Esq., The Briars, near Exeter.

Dr. TREFFRY, Place, Fowey, Cornwall.

(With power to add to their number.)

BANKERS—THE NATIONAL PROVINCIAL BANK OF ENGLAND, Bishopsgate-street, London, and Exeter.

SECRETARY—Mr. J. O. HARRIS.

OFFICES,—2 AND 3, GANDY STREET, EXETER.

ABRIDGED PROSPECTUS.

This company is formed to work the lead and barytes mines on the Venn and
 Birchaller estates, Bridford, Devon, of which leases have been obtained at 1-15th
 royalty for lead and other metals.

The property is 640 fms. in length on the course of the lodes, and is situated
 north of Frank Mills, in the same valley, and contains the same lodes. Frank
 Mills Mine has returned within the past twelve months above £16,000 worth of
 lead ore, leaving a net profit of above £5000 for the adventurers.

It is estimated that there are about 100,000 tons of barytes already discovered
 above the adit level, and that it can be raised and sold, either in its unmanu-
 factured or manufactured state, at a large profit.

Applications for shares to be made to the Secretary, at the company's offices,
 of whom full prospectuses and information can be obtained.

The Queen Silver & Copper Mining Co.

(LIMITED).

To be incorporated under the Companies Acts, 1862 and 1867.

CAPITAL £15,000, IN 15,000 SHARES OF £1 EACH.

Deposit Five Shillings per share on application, Five Shillings per share to be paid July 1, 1870, Five Shillings November 1, 1870,
 and the remaining Five Shillings March 1, 1871.

The directors to be chosen at the first general meeting of shareholders, of which due and sufficient notice will be given.

BANKERS—WEST OF ENGLAND AND SOUTH WALES DISTRICT BANK, TAVISTOCK.

SOLICITORS—Messrs. LUXTON AND SON, TAVISTOCK.

SECRETARY—Mr. THOMAS J. BARNARD, 5, ABBEY MEAD, TAVISTOCK.

The introduction of this great English silver mining property to the world is
 from clear facts indisputably destined to become an era of mining history, and
 add generally to England's wealth and national prosperity.

The set is held upon liberal terms under the Duchy of Cornwall and other
 grants, and is very extensive, being about four-fifths of a mile from east to
 west, and three-fifths of a mile from north to south. It is situated in the parish
 of Calstock, Cornwall, and is surrounded by the richest copper mines of England,
 and only a few hundred fathoms from the old Silver Valley Mine, which returned
 hundreds of thousands of pounds sterling from the sale of silver ore, and this
 independent of the silver lode, which is the same that passes through Silver
 Valley, and from whence such great wealth has been derived.

No. 1 is the silver lode. There are two trial shafts sunk on this lode to the
 depth of about 3 fathoms from surface, and a level driven from shaft to shaft,
 which is only about 26 fms. in length. The lode throughout this drive is from
 2 to 4 ft. wide, composed of flookan, prlan, carbonate of iron, interspersed with
 silver-lead and rich silver ore. From this shallow and very limited and primi-
 tive working more than £700 has in the past few months been received from dif-
 ferent smelters for the silver ore sales, disposed of in small quantities, but, ac-
 cording to their own assays, varying from 50 to 2000 ozs. to the ton of stuff.
 There is upon the course of this lode, at least one-third of a mile in virgin
 ground, not so much as a pick up in the earth. Really, when the fact is contem-
 plated of this being one of the richest silver mining districts in the world, proved
 long since for quality, but never, in a proper sense, tried at all for quantity, it
 is a puzzle to imagine what the mining world has been thinking of—not that
 this mine has any prejudice against it, as Capt. Knott (the agent), Capt. Gif-
 ford (of Prince of Wales), Capt. Donnel (of West Maria), and other mining cele-
 brities have an exalted opinion of its merits, although from their limited expe-
 rience in silver mining they cannot know its sterling value.
 We now come to Dr. Phipson's analysis, of which the following is a copy, and
 there is more substantiality in this than the flourishing reports of all the agents
 of England.

Laboratory of Analytical Chemistry, 4, The Cedars,
 Putney, London, 3d March, 1870.

ANALYSIS MADE FOR THOS. J. BARNARD, Esq., 5, ABBEY MEAD, TAVISTOCK.

Eight Samples of Silver Ore for Silver (marks as under).

"No. 1: 1 stone, weighing 50 lbs."—Fine silver, 25.334 per cent., equivalent to
 8275 1/2 ozs. (try) to the ton.

"No. 2: Half-ton of powder, 80 lbs."—Fine silver, 0.492 per cent., or 160 1/2 ozs.
 to the ton.

"No. 3: 2 stones, 14 lbs."—Fine silver, 0.3075 per cent., or 100 1/2 ozs. to the
 ton.

"No. 4: 5 lumps, 9 lbs."—Fine silver, 0.086 per cent., or 28 1-100 ozs. to the
 ton.

"No. 5: 1 lump, 11 lbs." (This is copper ore).—Fine silver, 0.03 per cent., or
 9 1/2 ozs. to the ton.

"No. 6: 1 stone of ore."—Fine silver, 18.5 per cent., or 604 1/2 1-10 ozs. to the
 ton.

"No. 7: Fine silver."—1.96 per cent., or 640 1/2 ozs. to the ton.

"No. 8: Decomposed kilas."—6 ozs. to the ton.

(Signed) T. L. PHIPSON, Ph.D., F.C.S. &c.,
 Member of the Chemical Society of Paris, Professor of Analytical Chemistry.

4, The Cedars, Putney, London, 3d March, 1870.

MY DEAR SIR,—Enclosed are the results of assays; they are all wet assays,
 and most careful ones. Nos. 1 and 6 were also assayed by dry assay, with as
 near as possible the same result. These are the finest specimens of silver ore
 that have ever been sent to my laboratory. Though I have received samples of
 silver ores now for nearly 11 years past from Cornwall, Scotland, Hartz, Saxony,
 and Mexico, &c., I never saw finer ones than Nos. 1 and 6 in my life, and have
 only seen one sample that gave a result at all approaching that which these two
 gave, and that was native silver in gossan (pure metallic silver running in
 threads through quartz gossan of a brown rusty colour), and the samples came
 not many miles from where you got your silver ores. It is well known that the
 Cornish silver ore is some of the richest in the world, far richer than that of
 Mexico (which averages 90 ozs. or thereabouts), but it is not so abundant as the
 Mexican ore.

Yours faithfully, T. L. PHIPSON.

Thos. J. Barnard, Esq.

A few remarks on the analysis may now be made by the proprietors of the
 mine:—

"No. 1: 8275 1/2 ozs. (try) to the ton."—Occasional stones of silver, about
 1 lb. to 1 lb. in weight, are found in the silver lode of this extraordinary rich-
 ness, and without a single doubt by thoroughly exploring this lode there will be
 discovered the same as was the case in the Silver Valley, occasional nests or
 pockets of silver ore, which in a few hours will yield several thousands of pounds
 profit for the benefit of the shareholders.

"No. 2: 160 1/2 ozs. to the ton."—This is a fair sample, taken from about
 25 cwt., now being got ready for sale, and placed under lock and key in the
 silver-house.

"No. 3: 100 1/2 ozs. to the ton."—Taken from a small pile in the silver-house;
 about 1/2 ton not crushed down.

"No. 4: 28 1-100 ozs. to the ton."—This is called refuse, taken from a pile out-
 side of the silver house, separated from the richest of the stuff that has from
 time to time during the past few months been placed in the house to undergo
 sorting, &c., before being sent to smelters.

"No. 5: Copper ore, 9 1/2 ozs. silver to the ton."—Taken from a pile of about
 30 tons, ready for market, sold as arsenical ore muddle, realising about £2 5s.
 per ton.

"No. 6: 604 1/2 1-10 ozs. to the ton."—From a small branch making away from
 the silver lode. Owing to the wet season, and having no pumping machinery,
 this branch is now and has been for some weeks past under water.

"No. 7: 640 1/2 ozs. to the ton."—This is a sample of one of the parcels sold
 last month to the smelters.

"No. 8: Decomposed kilas, 6 ozs. to the ton."—This is a decomposed kilas,
 or matrix of the lode, which shows that the lode is fairly pregnant with silver.

No. 2.—This lode where seen is 16 fms. deep, and is about 2 ft. wide, underlying
 south about 2 1/2 ft. in a fathom, and is composed of flookan, quartz, and prlan,
 interspersed with muddle and copper of good quality, but nothing has been done
 upon this lode beyond cross-cutting through it.

No. 3.—The depth where this lode is seen is 24 fathoms from surface, and
 about 50 fathoms north of the latter, varying in width from 1 to 5 feet, under-
 lays north 2 feet in a fathom, and is composed of peach, prlan, quartz, and
 capel, highly charged with arsenic, and interspersed with copper of good quality,

worth from £3 to £5 per fathom at this shallow level, and is now being worked
 on tribute by 12 men at from 10s. 6d. to 14s. In £1, the tributary paying all costs
 of breaking, hauling to surface, dressing, and making merchantable. The adit
 level is driven on the course of this lode some 150 fathoms, so that a large extent
 of ground has been laid open that will stoop at once on tribute, leaving good
 profits to the shareholders.

No. 4.—This lode is seen 30 fathoms deep, and is parallel to the two former,
 and 35 fathoms north of the latter, underlying south, and will form a junction
 with No. 3 lode at or about 40 fathoms below the present adit level, where opera-
 tions are now being carried on in the back of adit. This No. 4 lode is from 2
 to 4 feet wide, composed of flookan, quartz, and carbonate of iron, interspersed
 with muddle, copper, and silver-lead, and rich stones of silver ore; from this
 same lode immense quantities of silver-lead, rich silver ore, and also copper ore,
 have been returned from the East Cornwall Mines, adjoining this set on the
 west.

Nos. 5 and 6.—The lodes are seen in the adit further to hill, about 40 fathoms
 from surface, and are 35 fms. north of No. 4 lode, underlying south, and while
 the bearing of the three former lodes is from 10° to 15° north of west, the bear-
 ing of the two latter is from 25° to 30° north of west and south of east; conse-
 quently the lodes are nearer each other going east, and will form a junction
 with the north underlie, or No. 3 lode, at about 80 fms. below the present adit
 level. No. 5 is 1 1/2 to 2 ft. wide, composed of flookan, prlan, and carbonate of
 iron, interspersed with lead and silver. No. 6 being a strong, masterly, and highly
 mineralised copper lode, from 5 to 7 ft. wide, and in some places over 10 ft. wide.
 This lode is composed of peach, prlan, quartz, and capel, highly charged with sul-
 phur, arsenic, and copper ore; and on which profitable operations have been car-
 ried on by working the same on tribute for the last ten years, but never proved
 and price. An engine-shaft has been sunk to the depth of 60 fms., and at the
 bottom a short cross-cut was driven to intersect No. 3 lode. The hole was bored
 in the lode, and the men who bored it, and are still living, declare that it was
 in copper, but before they had had time to charge it with powder an accident
 occurred, by the main shaft-rope snapping asunder, the water rose, and the com-
 pany being without funds to repair the defective machinery, the bottom of the
 shaft has never since been seen. Verily, England is indeed teeming with mineral
 wealth, and any sensible person can see that it only requires science, capital,
 zeal, and industry of purpose, to prove the correctness of this assertion.

The proprietors of the mine will dispose of the property entire for 10,000 fully
 paid up shares; they ask no cash, or promotion money whatever; £5000 fully
 paid up shares are now offered to the public at £1 each, upon the easy terms before-mentioned,
 and Mr. T. J. Barnard, the secretary, knowing its sterling wealth, has taken
 the first 500 shares. It is proposed to erect a steam-engine (36 in. rotary), and
 the proprietors are now in treaty with Messrs. Nicholls, Mathews, and Co.,
 engineers, of Tavistock, for one of that size; as good as new, but at a second-
 hand price. The mine will be then forthwith drained, when operations can be
 commenced in real earnest upon the several copper lodes; and reviewing the
 whole matter, including the fact that at the present moment 12 men are at a
 shallow level raising copper ore to good profit for the adventurers, there is not
 the least shadow of a doubt that with capital, machinery, and zeal the copper
 department alone must in the course of a reasonable time enable the mine to
 give very handsome dividends. As for the silver department, its wealth is
 almost unbounded, as if in a space of 28 fathoms in length, with only a back of
 2 and price. So that there is no chance for a sensible stoop, £7000 worth of silver
 has been found and sold in this little spot, what may not be expected by properly
 working the mine? The opinion is that the silver ore will hold down to about
 70 fathoms, where the lode will change into and return large deposits of silver
 lead. It will be seen that smelters are very ready to purchase the silver stuff,
 and of course they must have their profit, but it is the intention of this
 company to ignore their services, and erect amalgamating works upon the prop-
 erty, so that the silver may be extracted upon the spot; as a preliminary trial,
 machinery on a small scale will be erected, to be worked by the present horse-
 power now upon the mine, and the stuff already in the silver-house will be
 operated upon. Mr. Barnard is promised the first 500 ozs. of silver at 5s. per oz.
 as it is his intention to have it converted into articles of vertu, in remembrance
 of the first English silver mine worked upon the same principle as foreign ones.

This is the most wonderful, promising, and the cheapest mineral property
 ever brought before the eyes of a discriminating public, taking into considera-
 tion the silver with the copper lodes, and faith need not be built upon discover-
 ing masses of pure silver, although, as before stated, there is not a shadow of a
 doubt that occasional deposits will be met with worth thousands of pounds,
 but reliance can be centred upon an average of 20 ozs. to the ton of stuff; take
 the lode as it now stands, pull down 50 tons pell mell, pulverise the whole, and
 it is believed the result will be 20 ozs. to the ton, as the very poorest part con-
 tains 6 ozs. Of course it will be prudent to keep a sharp look out for the pure
 silver, so as not to mix it with the poorer stuff, but it will not matter much, as
 place the whole under the proper treatment of amalgamation, and not a grain
 will be lost, be it 10 or 1000 ozs. In the future the engine used for keeping the
 mine clear of water for the development of the copper ore lode can be applied
 for working the revolving barrels into which the silver stuff is placed with
 mercury, after being properly worked and smashed into a pulp, so that the two
 departments can be carried on under one head of cost.

In conclusion, the public is earnestly invited to come and see for themselves,
 and any intending shareholder is requested to take a sample of stuff in the
 silver-house, or inspect the mine and break from the lode itself, and submit it
 to any analyst. A little time will prove, as soon as the amalgamating process
 is working successfully, that this property is an immense fortune, which will
 cause a perfect furor for English mining, as it only requires to be proved that
 England does contain silver, and in good quantities, for the capital and enter-
 prise, science soon steps in to lend it a helping hand, and with its rapid strides
 it is highly probable for England to soon become an exporter rather than im-
 porter of silver, as if it is possible for 6 ozs. of silver to the ton of stuff to be
 extracted with profit, there are millions of tons of such stuff that have been
 turned over in working English mines, and we can now mention a lead lode in
 an entirely new district where the lode only 2 feet from the surface is composed
 of gossan and flookan, 20 feet wide, and the average of silver is 7 to 10 ozs. to
 the ton.

What a blessing, what an achievement for the "Queen" to attain, to be the
 mainpring of opening up rivers of wealth, adding fresh laurels to England's
 world-renowned fame for thousands of years, as the first and great mining seat
 of the world, calling back with a hearty welcome her sons of toil from foreign
 climes, who through the temporary depression of English mining have been
 forced from actual want of daily work and bread to leave its well-loved shores.

Applications for shares to be made on the forms to be had with prospectus
 from the secretary or bankers.

THE QUEEN SILVER AND COPPER MINING COMPANY.

Notice is hereby given, that THE SHARE LIST IS CLOSED; and that ALL THE SHARES HAVE BEEN ALLOTTED.

Any information respecting the Company can be obtained by addressing Mr. THOMAS J. BARNARD, the Secretary, 5, Abbey
 Mead, Tavistock, who will readily reply to any communications which may be forwarded to him.

Original Correspondence.

FESTINIOG SLATE QUARRIES AND RAILWAY,
MERIONETHSHIRE.

There are 11 slate quarries or mines in operation here; the principal are owned by the Welsh Slate Quarry Company, Mr. Holland, M.P., the Cwm Morthen Company, Mr. Graves, Messrs. Matthews and Son, Mr. Perceval, Messrs. Casson and Co. The quarries are chiefly on the same vein. The largest quarry is possessed by the Welsh Slate Company; the vein is 50 feet in thickness, and lies at an angle of 45° northward; the vein produces slate uniformly of a dark blue colour, and of good quality. The production of slate is about 3500 tons per month; employment is given to 300 persons. The quarry was first worked in open work, and about 50 yards in depth was obtained in this manner; now it is got in chambers underground, as in a mine, pillars being left between these chambers to support the superincumbent rocks. The slate is extracted in successive stages of 20 yards in depth. On the north side of the quarry a water-balance pit is sunk, 100 yards in depth; to the bottom of this pit an adit level has been driven from a considerable distance, which thus gives free drainage for this pit and all parts of the quarry above this level. Most of the slate and waste slate is raised at this pit; at the top of it there are extensive sheds and machines for squaring slate, and circular saws for squaring and cross-cutting slabs. There are 23 underground chambers, of the uniform width of 50 ft., dipping at an angle of 45°; the roof is trap rock, dips at 45°; pillars 40 ft. in width are left between the chambers. At present slate is being extracted from the stage below the adit level. Two engines are placed at two different points to raise the material from the bottom up to the level of the adit, equal 20 yards; a turbine is used for pumping water from the same depth. Communication is made between the chambers for ventilation, and for the conveyance of material to the engines; these openings are about 6 feet square at the bottom of the stage. At the level of 60 yards from the top of the quarry, or 40 yards above the adit, the machine is placed in the quarry for weighing all the slate brought from three different parts of it. Near this machine is the foot of a water-balance incline, to raise waste; also the tops of two similar inclines raising slate and waste from the level of the adit, the water escaping from the former supplying the two latter. From the weighing machine the finished slate is conveyed away through a tunnel cut in the rock under the vein, from whence it descends a self-acting incline, dipping 18 inches per yard, to the main line of railway. One-sixth of the whole extraction is saleable slate. Powder and gun-cotton are both used. The machines for squaring slate to the proper size are put in motion by steam-power; the work is better performed thus than when done with the foot of the operator. Slabs are not often planed, as they suit better with the natural face for many purposes.

From Festiniog, a road through Dolwyddelan leads to Bettws-y-Coed, distant ten miles. A range of hills on either side are composed of greenstone and slate rock. The greenstone rocks are seen projecting above the surface in every direction between these two ranges. Slate of a dark colour is worked at two or three quarries in this locality, but only in a limited way. A footing can scarcely be obtained for agricultural pursuits; the ground would, no doubt, be most profitably utilised in the growth of timber. From Bettws-y-Coed Railway communication is obtained to Conway, 16 miles distant. The range of hills on either side of the vale of Conway are composed of the same Cambrian rocks: no slate quarrying or any mineral working appears to be in operation here.

The Festiniog Railway, from the slate quarries to Port Madoc, 13½ miles in length, has been in operation about 20 years; at first horse-power was used; for the last six years, however, locomotives have been in use for the conveyance both of minerals and passengers. It is remarkable as producing, perhaps, the highest dividends of any railway in England or Wales. The railroad, a single line, is almost wholly on sharp curves, on a circuitous course, with steep gradients; the gauge is 23½ in. only. Much hard rock was encountered in the cuttings of the railway formation, which precluded the idea of an ordinary gauge, consistent with any profitable result. The line has proved most successful under the circumstances, and will, no doubt, lead to the extensive use of this class of railways in mountainous districts. There are six locomotives in use, with 8-in. cylinders, 12-in. stroke, four 24-in. wheels, coupled, besides one engine on Fairlie's principle. The passenger carriages are 6 ft. 4 in. wide; the floor is 6 in. above the rails. New carriages are being constructed 5 ft. 4 in. wide; the floor more elevated, and the wheels underneath.

Fairlie's double-bogie engine, used on this line, has four cylinders, 8-3-16th inch diameter, 13-inch stroke, 28-inch wheels; total weight, 19½ tons. It will take a load of 100 tons after it, at an average speed of 12½ miles per hour, excluding stoppages; steam pressure, 160 lbs. The other six engines are nearly alike as to power; the weight of one is 10 tons, and tank 1½ ton; others are heavier, being tank engines. The speed was limited to 12 miles per hour on the line being passed for passenger traffic. The journey of 13½ miles is done in 1½ hour.

THE PENRHYN SLATE QUARRY, CARNARVONSHIRE.

This quarry is distant six miles from Bangor, and one mile from Bethesda, the latter now containing 6000 inhabitants. The Penrhyn Quarry gives employment to about 3000 men and boys, and has since the year 1782 been carried on by the Lords Penrhyn, increasing in extent and aided by mechanical appliances as the demand for roofing slate has increased. The slate is quarried by open work, and the drainage is effected by an adit level, one mile in length, driven from the valley, to within 40 yards of the deepest part of the quarry. The vein of clay-slate is above 400 yards in breadth; it runs in a north-east and south-west direction, and lies nearly vertically; other slate veins found in the district run in the same direction. These veins alternate with beds of igneous or trap rock, otherwise termed whinstone, or greenstone, and is the predominant rock of this district, the beds varying in colour from dark green to a light shade. This rock is much used for building purposes. The surrounding hills are composed principally of greenstone. Prominent amongst these are Carnedd Llewellyn 3469 ft., and Carnedd Dafydd 3427 ft. above the sea, in the same range with Snowdon, which is 3571 ft. above the sea level. The whole of the Carnarvonshire hills may be said to be composed of this igneous greenstone, alternating with clay-slate and slaty rock, constituting together the Cambrian formation. There is every probability these hills have deposited within them other minerals besides slate and the small portion of copper ore which is found; ironstone is said to exist near the coast, so highly magnetic as to attract the needle, and there are doubtless other minerals of commercial value to be found, should they ever be explored internally, which would prove sources of national prosperity. The hills of Carnarvonshire indicate volcanic action of great extent, and stupendous forces exercised to place the rocks in their present position.

The Penrhyn Quarry is worked from the base to near the summit of a high hill. The slate is extracted in tiers or galleries, each tier being 20 yards in depth, the quarry thus expanding in breadth upwards. There are 15 galleries worked down to the adit level, equal to 300 yards. Each gallery has a railroad running along it on either side, 2-ft. gauge, conveying the slate to various inclines, or water-balance pits. On the north side of the quarry there are three self-acting inclines in succession, serving for 11 galleries, the lowest delivering at the top of the balance pit, all on the same level. Each incline serves for three and sometimes four galleries. In sending slate down from the top, these inclines act in the ordinary way; in sending slate from one of the intermediate galleries, the points are turned into it. A balance wagon is run from the top against three empty wagons; these are run into the siding, being replaced by three laden wagons, the latter are run down to the bottom of the incline, which raises the balance wagon up to the top again, ready for another run. On the south side of the quarry there are four of these self-acting inclines, serving for 15 galleries. These inclines are formed with double roads; drums and wire-ropes are used.

The water-balance pits, on the north side, all commence from a common level—that is, four tiers above the adit level, or eleven tiers from the top of the quarry. There are six of these pits above the level of the adit—two of 80 yards depth, two of 60 yards depth, one of 20 yards depth. There is another pit, 120 yards deep, which is sunk 40 yards below the level of the adit, and from which slate in

two tiers is being got. The sinking of this pit necessitates pumping operations; for this purpose a hydraulic pumping-engine, with double cylinders, placed diagonally, is fixed at the adit or 80 yards level. This engine works by day and night, with three bucket lifts, each delivering to the adit level. The carriages at each of the balance pits hold one and sometimes two wagons each, four-linked chains are used; when one of these occasionally breaks, the others hold good. Underneath the carriages there is the balance chain, as usual. The Penrhyn Quarry produces slates of blue, purple, red, and green colours, named in the order of their prevalence; the last is most rare, and sells for double the price of other colours. About one-sixth of the entire vein forms roofing slate, the remainder, or waste, is tipped at the end of each gallery in most cases, so that it may be conceived an immense space is required for this debris. The quarrying and making of slates is all done by piece-work. Several hundreds of sheds and machines are erected for squaring slates; these are placed in particular localities—for instance, at the level of the top of the balance pits a great number of machines are fixed; these machines are suspended from a spring, they cut one side of a slate at each stroke, and are worked by the foot of the operator. Smaller slates are squared by hand in a slower manner. The largest size of slate manufactured is the Queen's, 3 ft. long; slates are made of all sizes below this. The lowest self-acting incline on the north side, from the level of the balance pits to the main line of railway, is worked by an endless chain, originally 1 in. thick; four wagons are run at once, in two separate lots. From thence the slates are conveyed in iron wagons, with flanged wheels, to Port Penrhyn, six miles distant; 24 wagons, 2 tons in each, are taken in each train by three horses. There are three intermediate self-acting inclines in this distance, having double roads, drums, and wire-ropes. The gauge of the railroad is 2 feet. A remarkable vein of greenstone, 4 or 5 feet wide, runs through the Penrhyn vein in a north-east direction, a similar one runs in an oblique direction; there are four or more of these at right angles to the former. One of these cross veins may be seen standing in the centre of the quarry, a pillar of greenstone, about 60 yards high and 3 yards in thickness, and another cross vein further on of less height.

The blasting of the slate is performed every hour in the quarry; five minutes is allowed at each period for firing shots: at the sound of a horn the lights are applied, sometimes as many as 50 shots are fired in five minutes. Both powder and gun-cotton are used for blasting: the use of nitro-glycerine has been discontinued.

About one mile from the quarry the machinery for sawing slate slabs is placed. There are eight circular saws and frames and one planing machine. Very little is done in planing; the slabs are sawn and sold extensively for paving, cisterns, &c. Slabs of remarkable strength are found only recently in the quarry, which promise to excel Yorkshire paving in durability and cheapness. These are understood to be extracted from the lowest part of the quarry, the lowest parts as a rule producing the best quality of slates and slabs.

Adjacent to the sawing sheds are built the foundry, machine shop, vertical and circular saw-mills, smiths' and joiners' shops; the latter contains joiners' drilling, mortising, and planing machines, which, considerably economise labour. The whole of the machinery is put in motion by a water-wheel, 20 ft. in diameter, 5 ft. wide. Another small water-wheel works an endless chain used at the weighing machine. Several veins of excellent slate occur between Llandegai and the Penrhyn Quarry. These are all in Lord Penrhyn's property, none of them are at present worked, owing, perhaps, to the very favourable position and productiveness of the quarry at Penrhyn. The Penrhyn vein is not worked at all on the north-east side of the quarry. On the south-west side, seven miles distant, the Llanberis Quarries are in operation on the same vein; they are the property of Mr. G. W. Duff, of Vaynol, and give employment to about 2000 men and boys.

THE NEW COAL FIELD AT NOTTINGHAM.

There is now every indication that the new coal field at Nottingham, the principal seam connected with which was reached on the Clifton estate on March 25, will be one of the most valuable mining properties in the kingdom, seeing that it contains several very excellent seams of workable coal. Its discovery is entirely due to the exertions and the determination of the late Sir R. CLIFTON, Bart., who was the owner of the estate on which the borings were first made, and who, in opposition to the opinions of geologists, and despite the fact that the geological maps did not show that there was any coal to be found in the district, yet felt assured that there were valuable seams of minerals on his property. Supported by the opinion of Mr. J. BROWN, the well-known mining engineer, the usual steps were taken for proving the strata. Accordingly on June 10, 1868, the first sod of No. 1 shaft was turned, amid the acclamations of thousands of the inhabitants of Nottingham and the neighbourhood. The site fixed upon was a field on the Clifton estate, about half a mile from Nottingham, hard by the banks of the River Trent. Sinking was continued without much interruption, although during its progress a good deal of water was encountered, until the lower seam of coal was reached, as above stated. In going through the strata, which included a good deal of grey sandstone, blue bind, shale, and clunch, a considerable quantity of ironstone, that known as the "shell bed," most of it nodules, was met with. Of the coal itself no less than 24 different seams were gone through, of which nine at least are workable, whilst in the last 40 yards sunk there were four seams of coal, of the aggregate thickness of 17 feet. The first seam met with was found at a depth of little more than 60 yards, and was 2 feet 8 inches thick. The principal seams, however, are the "Deep Softs," an excellent house coal, 5 feet thick, and the "Deep Hards," 5 feet 7½ inches thick, a fine steam coal, the distance between the two seams being only 13 yards. The bottom, or Piper, coal was reached whilst sinking the sump, the total depth being 267 yards 2 feet. About 100 yards from the surface is the Dunsil Yard coal, which is a rather important one, seeing that it is considered the key to all the other measures in the coal field, for where it is found the other seams are pretty certain to be met with. Some of the coal contains a thick band of bastard Cannel, having a good deal of oil in it, and locally known as "Rattle Jack." With such really valuable seams of workable coal, and seeing that a road direct from the pit bank to the town of Nottingham, on the Clifton property, can be easily made, the value of the new colliery, situated so advantageously, and with such valuable beds of coal, can scarcely be over-stated. When the two shafts are completed it is expected that about 1000 tons per day will be raised, and which, in all probability, will find a constant and ready market at Nottingham. Should such, however, not be the case, there are other facilities for exporting the produce of the colliery, as the Midland Railway runs quite close to it on one side and the canal on the other. It is a matter of general regret throughout the district that Sir R. CLIFTON did not live to see the completion of the work in which he took a deep and unflinching interest, and the result of his spirited enterprise carried out by him whilst surrounded by difficulties of no ordinary character. He had evidently looked forward to it as a means of clearing his estate of its encumbrances, and which it would most undoubtedly have done, besides securing a large and permanent annual revenue. This will be at once apparent when it is stated that the estate comprises, as we were informed, nearly 3000 acres, whilst if the two seams, the Deep Hards and Softs, were alone worked they would give a yield of upwards of 15,000 tons per acre, or with the Piper seam about 20,000 tons per acre. On one part of the estate there is a "fault," which will be proved in driving out, but which cannot in any way materially affect the working. In boring a seam of coal was met with at a distance of 160 yards, whilst the same seam in sinking at a depth of about 60 yards.

With regard to the colliery itself, it may be stated that there are two shafts, the one where the coal has been reached being 14 feet clear in diameter, tubbed with cast-iron to a depth of 80 yards. The No. 2 shaft, which is quite close to the No. 1, is 13 feet in diameter, at present sunk to a depth of about 40 yards, 30 yards of which are tubbed. The machinery, buildings, and appliances are of a first-class description, and of a substantial character. The foundations for the winding-engines are concreted 12 feet below the surface, with 15 feet of solid brick pillars. At present there are on the works a pair of winding-engines at the No. 1 shaft, each of 20-horse power, and a 40-horse power engine at the No. 2 shaft for sinking. There is also a very powerful pumping engine by HAWKLEY, WILD, and Co., of Sheffield.

For the purpose of pumping the water out of the shafts there are two 15-inch diameter working barrels, but it is not anticipated that more than one of them will be required. Every preparation has been made for putting down the machinery, which will be necessary when both shafts are completed, and active operations in drawing commenced. Having so far noticed the most recently discovered coal field, with its very valuable beds of coal and ironstone, and the colliery opened out in the Clifton Hall estate, we cannot conclude our notice without stating that it is the opinion of practical men that the same measures found in it will also be met with in adjoining properties, so that the locality gives every promise of becoming a very important centre of industry so far as the coal trade is concerned, being advantageously situated for doing a large business in the important manufacturing districts around Nottingham, and more especially in the town itself, whilst it will be enabled to reach the London market by the Midland Railway on rather better terms than most of the collieries sending there from the adjoining counties. As Mr. H. R. CLIFTON, the present owner of the estate, is understood not to be desirous of working the minerals on it, the colliery it is expected will be taken to by a company. Worked with energy and with good management the colliery will, doubtless, rank among the best paying mining enterprises which have of late years been opened out. Sinking operations have been carried out so far without any serious accident or hindrance to work, but at present the No. 2 shaft is not being proceeded with, but orders for going on with it are daily expected. Mr. J. BROWN is the engineer, and Mr. MARSH, of Clifton, the manager. The contractor for the sinking is Mr. GREEN, of Clay Cross, and Mr. GILLIVER has charge of the sections, plans, &c. The following are some of the beds of coal gone through in sinking, and from which it will be seen that several of them can be worked advantageously, although, probably, only the two thickest will be got when operations are commenced:—

Coal	Thickness.	Yds.	Depth.
Coal, Hard Rider Top	2 6 0	70	0 5
Coal, Dunsil	1 0 0	90	0 5
Coal (good)	0 1 10½	113	2 6
Coal	0 0 7½	136	2 8
Coal	0 2 4	154	0 5
Coal	0 1 11	162	0 0
Coal	0 1 10	175	11 3
Coal, good Softs	0 2 10	231	0 0
Coal, fine Deep Softs	1 2 0	239	1 8
Coal, Deep Hard	1 2 7½	252	2 0
Coal, Piper	1 0 4	267	2 0

The last seam was come to whilst the men were engaged in making the sump. The depth to the bottom coal, it will be seen, is 267 yards 2 feet, but as the pit bank is raised 12 feet from the surface the actual depth will be 279 yards 2 feet. Coal for the requirements of the works, it may be stated, is now being raised.

ON DIFFERENT METHODS OF WORKING COAL.

Mr. P. COOPER read a paper on this subject at the Midland Institute of Mining Engineers: he commenced by alluding to a communication by Mr. Fowler, who advocated the long wall system of working, without any preliminary strait work, and remarked that other practical men contended that it was better when working a clean bed of coal, with a good roof, at a moderate depth, and with a suitable inclination, to make and maintain both the temporary and permanent roads through coal or in strait work. In estimating the cost of the two systems, Mr. Cooper said that in working the Barnsley bed, 5 feet in thickness, the average cost of strait work coal roads, 9 feet wide, was about 5s. per yard, in addition to the price paid for the coal, which on the same quantity of coal was equal to 2-33 pence per ton. In beds of a similar thickness, however, in the North of England, Lancashire, and North Yorkshire, the cost of coal roads did not exceed 1s. 6d. per yard, or for the same quantity of coal about ½d. per ton. From careful investigation made he was, therefore, of opinion that in clean beds, having a good roof, the cost of coal roads per ton was very much less than the cost of goaf roads, except in cases of very bad roofs, or where an excessively high rate was paid for driving coal roads. With regard to the great influence produced by the weight of the superincumbent strata resting on any coal bed, he considered there was no condition of mining of equal importance to it, and it would be a mistake to suppose that the goaf roads in working long wall were exempt from its influences. But considered simply as passages requiring to be maintained, they could not fail to compare to a disadvantage with coal roads having a good roof efficiently supported by sufficient pillars. So far as making or maintaining such roads was concerned, it was evident that the advantage must be in favour of roads cut through the natural ready-made support—the coal. Except in beds yielding much refuse in working, the temporary and only support of the roof in goaf roads was the pack walls, of (say) 6 feet each in thickness, or 12 feet for a 22-yard stall, the support being less than 19 per cent. of the gross area, and consisting of unconsolidated material, instead of 75 per cent. of solid consolidated coal. Therefore, if working by long wall did not produce better than any other method coal as large, and with as little small as possible, it had nothing further to recommend it in clean beds of coal, having good roofs, with a moderate inclination, for there could be no doubt that under such conditions it was generally the dearest method of working coal, except in beds consisting of exceedingly hard, coarse coal.

With regard to the production of saleable coal, Mr. Cooper said that there were certain operations, whether in working by long wall or by any other system, which must produce small coal, namely:—1. Holing or kirving in the coal.—2. Nicking or cutting.—3. Cleaving up to load webs of coal a yard in thickness.—And, 4. The breakage due to loading into corves, transit, and unloading on the surface. As to holing, if only 6 in. out of the 4½ ft. (as given by Mr. Fowler) were cut up into indisputably small coal by the process, the result would be 11 per cent. of slack from this cause alone, and would be the same in all methods of working. Nicking or cutting 1 ft. out of every 22 yards stall making 1½ per cent. of small coal. For cleaving up to load 5 per cent. of small coal is a moderate allowance, whilst the breakage by loading and transit to surface averages about 8 per cent., making a total of 25½ per cent. of small coal produced in working a clean bed. Looking at the returns by the long wall system, he saw no reason why as good coal could not be produced at a cheaper cost when the bed was worked by long wall with coal roads instead of goaf roads. With regard to the weight of the superincumbent strata resting on any unworked coal bed, it would be the same in whatever mode of working was adopted. The greater the depth, however, the greater would be the pressure of the strata, and the greater the original elasticity of the coal, roof, floor, and gas. There was a general impression, which he thought was utterly unfounded, that the action of the superincumbent weight was different in long wall and in working by bord and pillar. This, however, could not exist except to the extent that the quantity of coal on which the pressure rests is reduced by the necessary strait work—say, from 15 to 20 per cent. The most important question was undoubtedly the action of the pressure on the coal and roof in the working places. In bord and pillar working, and in many cases of bank working, the practice was to have the working face at right angles to the line of pressure, the result being that the faces and gateways stood much better than in long wall, with an unbroken face line, which would of necessity be parallel, or nearly so, to the line of resistance, and consequently fracture, the result being that tender coals worked in that manner produced better results than when worked by long wall, either with a continuous face line or in steps.

In concluding his very able and interesting paper, Mr. Cooper said that where holing was not made in dirt beds, in working a clean bed of coal, with a good roof, the following general principles would be found correct:—1. Coal roads were generally constructed and maintained cheaper than goaf roads, and the working faces were also more cheaply maintained, as they required to be less permanently supported than in working long wall with goaf roads.—2. The blasting required in making and maintaining goaf roads, where fire-damp was freely evolved in the goafs, was attended with much danger.—3. Making and maintaining coal roads was neither difficult nor expensive, and such roads make better horse, self-acting, and better air-roads than goaf roads.—4. In coal beds, when thinly laminated by

in very strong coals.—5. That the minimum of slack or small coal which can be provided in working such beds by any method is not less than 25 per cent.—6. That in working coal beds by any method of working 25 to 40 per cent. of slack may be taken as the general results.—7. That in very few cases in working long wall as much as 70 per cent. of the entire bed is obtained of large coal, and that where obtained it is due more to the strength and character of the coal than to the method of working.—8. Where the normal condition of the bed and roof is that of great elasticity it should be worked long wall in the end.

A cordial vote of thanks was awarded to Mr. Cooper for his interesting paper. The general subject was then discussed by the members.

The meeting of the Midland Institute of Mining Engineers at which the above paper was read was largely attended. Amongst those present were Mr. T. Embleton, the president; Mr. P. Cooper, the Holmes Colliery, Maseborough; Mr. Kell, Warren Vale, &c.; Mr. Hodgson, Normanton; Mr. Warburton, Stanley, Wakefield; Mr. Maddison, Woolley Colliery, near Derton; Mr. J. Warburton, Normanton; Mr. Fowler, Basford, Nottingham; Mr. Lupton and Mr. Weldon, Chesterfield; Mr. Miller, Stafford Main, Barnsley; Mr. Hunter, Crigglestone; Mr. Collier, Worsborough; Mr. J. Beaumont, Mr. Minto, and Mr. Barker, the Oaks Colliery; Mr. J. Wilson, Darfield Main; Mr. Weeks, North Gawber; Mr. Davy, Mr. Mammatt, &c.

THE COPPER TRADE, AND ITS PROSPECTS.

SIR,—We have forwarded to us, with a request to procure insertion in the *Mining Journal*, the enclosed translation of a letter sent to a firm in Valparaiso by a correspondent in Paris, and we trust you will be able to comply with the writer's wish, and publish it in an early edition.—London, April 8.

SIR,—As it is your wish to know the opinion prevailing in our market about copper, in order to present it to your producers who read with interest news springing from some impartial source, I hasten to fulfil the wish, and to give you my ideas upon an article of such eminent importance.

During a period of three years copper has been engaged in a kind of struggle, marked by fluctuations in prices, which seem to give certain limits to its movements. You will remember that at the end of 1867 Mr. Edwards endeavoured to raise the price, and purchased largely at £13 to £13½ (the freight to Liverpool was at that time 3s. per ton), and held the copper at the coast, making thereby a "void," which we should call fictitious, and, supported by English speculators, succeeded in raising prices to 200 frs. per 100 kilos, in Havre, and 78s. per ton in Liverpool. When this operation became known, and when it was evident that the copper was kept back, and that the quantity produced was not diminishing, prices fell back to 170 frs. in Havre, and 66s. 10s. in Liverpool.

At the end of 1868, when it was foreseen that the exports from Chili would not reach the amount of 1,000,000 cargas, a new speculation was organised in England, which raised prices to 76s., and kept them thus for three months, though paying an advance for distant delivery. This operation gave a premium of 2 to 3 per cent. to copper ("to be delivered") over copper on the spot, and spoiled the position of the article, as it presented "a future" to the producers, a future which in reality existed only in the imagination of the dealers. Even the concurrence of certain enthusiasts baffled its rise, and all illusions came down with prices. When the permanently increasing shipments became known, prices came back to 68s., in order to fall gradually to 66s., to rise to 67s., and to fluctuate between those two limits, about which our market trips without animation, not being able to withdraw from that narrow circle which presses it so close, and paralyses all its movements.

Different reasons for this strange position may be alleged. Your chief producers, deceived by the difference in prices between the "spot" copper and that for "future delivery," declined to realise their stocks, but consigned them to Europe for sale at limits much too high for practicable prices. A large number of speculators intended to resist, and founded their refusal to sell on what I think a mere apparition instead of a reality, and I believe that when your producers remained in so doubtful a position it was because they were subject to the same illusion. It is said that money is very cheap just now, 2½ to 3 per cent. in England, and 2½ per cent. in France; rent and warehouse charges would scarcely reach 5 per cent. The prices of 66s. and 68s. in Liverpool, and 178 to 275 frs. in Havre, represent the very lowest quotations ever known, so it would be of no use to sell now—patience is not costly.

Do not you see that this argument is not specious, and that a great danger is to be foreseen? Undoubtedly patience has often kept from certain ruin those who find strength and courage in it, but it is not true in an absolute way. The limits of prices between which copper is now moving, are they unchangeable? Are they out of reach of essential circumstances which determine production and consumption? Here are some facts:—

In 1867, Chili exported	Tons 43,345
In 1868, ditto	44,244
In 1869, ditto	55,500
The excess of 1869 over 1868 is thus	Tons 11,300
ditto 1869 over 1867 is thus	10,400

Let us now compare the difference in stocks, reckoning merchandise at sea to Europe, and quantities in the ports of arrival. On Feb. 28 of the following years we have—

1868,	1869,	1870,
11,910	13,850	25,304 slabs at Liverpool, Swansea, and Havre.
11,900	13,900	14,720 slabs at sea.

With regard to production in 1869 there was an excess of 10,500 tons over 1868, and of 16,000 tons over 1867. The excess of the stock has thus only been caused by the increase of production in Chili. You know better than I do the cause of this increase. You also know what the year 1870 has in store for us. If it is equal to the preceding year we shall have at the end of it a stock of 52,000 tons. Consumption has not been augmented because the increase of stocks surpasses the increase of Chilean exports, and you will observe that from 1867 to 1869 there were circumstances which specially increased consumption, such as the fabrication of copper coins in the different parts of Europe, and the active demand caused by the non-accomplished modification of military equipments.

These are two great sources of consumption much missed at present. We miss also the continued and regular substitution of iron vessels for wooden ones, as the latter were covered with copper sheathing, which the former do not require; and if now the general pacification of all questions which have had the privilege of disturbing business, is the only way to activity and an increase of commerce, we have not to forget that the above-mentioned reasons are difficult to be realised, except by the aid that a general confidence can afford. On one hand we see a *status quo* in consumption, on the other an increase of 20 per cent. in production in one year. Can the production be diminished, without loss to the miners, to the figures of the years 1867 and 1868? or has it to go the regular path shown now-a-days to all industry—to develop itself nearly indefinitely? This is the whole question, for there is one superior law, and this is the position between consumption and production; only between that we find stability in prices, and comparisons with the past are only delusions, if we do not look to that superior law. Patience is a cure; cheap money is a remedy which, instead of curing the evil merely prolongs it. If the production of 1870 is to be equal to 1869, our rates are too high, and must fall, till fresh consumers are brought forward, or till the equilibrium is re-established by the production being made more equal to the necessary quantity required.

Everything depends upon your producers. If their interest forces them to continue working the mines on the same basis as in 1869, they must renounce the idea of obtaining in future the prices paid at present; they must lower their limits of sale on their consignments, in order to manage the transition, and the situations now prepared for the article. In the other case, a great number of speculators (who will soon have a clear insight into matters) will make quotations threatening enough to those who have made advances, and whose fears in a critical hour will engender a panic. The large quantity which may be thrown upon the market in a single day will not find a counterpoise, and must provoke a fall in price, from which it will take a long time to recover.

In conclusion, I say the problem is to be solved by one of these conditions—either by a great decrease in production at the same rate of prices, or by a continuation of shipments on the same scale

as in 1869, with slowly and gradually declining prices or fluctuations, according to the exigencies of the situation. F. M.
Paris, March 2.

THE NEW COPPER PROCESS.

[From the New York "Engineering and Mining Journal."]

SIR,—The experiments on the new humid process for the extraction of copper from its ores, devised by Mr. James Douglas and myself, have been retarded by attempts to construct efficient lixiviating tubs. Those first put up at Harvey Hill did not permit a thorough agitation of their contents, and hence, though about 1 ton of copper was extracted in the first trials, the results were imperfect. We have now, however, arranged a plan of tanks with vertical stirrers, which promises to overcome the mechanical difficulties. Meanwhile we have made trials with a Freiberg barrel, with the following results:—The ores, dressed to about 20 per cent., and containing a considerable proportion of carbonates of lime and magnesia, were passed through a sieve of 40 meshes to the linear inch, and calcined at a low red-heat, after which operation they held from 5 to 6 per cent. of copper as soluble sulphate, and the remainder as oxide. Charges of 3 cwts. and 4 cwts. of this were treated with the prescribed bath of protochloride of iron, previously heated to 212° Fahr., and after six hours' agitation in the revolving barrel the gangue was found to contain not more than 0½ per cent. of undissolved copper. From the solutions in several trials it was found that 100 parts of metallic iron threw down from 170 to 172 parts of pure cement copper. The precipitation is very rapid, in tanks, having the iron arranged on gratings at different levels, the liquid being kept hot by introducing a little steam. After 12 hours the solution, nearly freed from copper, is ready to treat a fresh portion of ore. The reaction in this process may be briefly stated as follows:—1. From the solution of protochloride of iron, oxide of copper precipitates oxide of iron, forming chlorides of copper.—2. From the chlorides of copper, metallic iron precipitates metallic copper and regenerates protochloride of iron. These two operations alternating with each other, the same bath, with certain precautions, may be used indefinitely.

In the above trials the amount of protochloride regenerated was found to be about 30 per cent. of that in the original bath. This deficiency, which is much less if air be carefully secluded, may, as we have explained, be supplied by the action of sulphurous acid on the precipitated iron oxide. By passing a current of this gas through the barrel during solution it has been found easy, on the large scale, to get a gain of 20 or even 50 per cent. of protochloride of iron in the regenerated bath, a result much beyond that desired—the maintenance of the original strength. Practically, the use of sulphurous fumes from the furnace in this way, as described in the British specification (published in your columns), has the disadvantage that the oxygen of the air always present, raises all the dichloride of copper to the state of protochloride, at the expense of a portion of decomposed protochloride of iron. It is only after this that the sulphurous acid reduces the suspended ferric oxide with formation of insoluble sulphite and soluble sulphate of iron. We, therefore, prefer a method described in the American specification, and inadvertently omitted in the English one, which consists in treating with sulphurous acid the insoluble residue from the solution of the oxide of copper. The turbid solution, being drawn rapidly off from the gangue, soon deposits its suspended iron oxide in a settling tank, from which the liquid is drawn to the precipitating tank containing scrap iron, while the deposit of iron oxide, retaining but a small portion of the copper solution, is separately treated with a current of sulphurous acid, and furnishes abundance of protochloride of iron to reinforce the bath as desired. The strength of this is determined by a titrated solution of permanganate. In a note to the printed specification sent you I have called attention to the power of cupric chloride to dissolve copper from copper-glance, purple ore, and regulus rich in copper. With copper pyrites, however, the action of the chloride of copper is but feeble, and only the iron of the double sulphide is attacked. This reaction of cupric chloride is analogous to that long since observed by Karsten, between chloride of copper and sulphide of silver. In fact, a solution holding cupric chloride with common salt chlorides and dissolves both silver sulphide and metallic silver, a reaction which lies at the basis of the old Spanish patio process for the extraction of silver from its ores. In the application of our new copper process to the ores of Eastern Canada, some of which contain portions of both gold and silver, we have taken advantage of this reaction, and have found that in the case of an argentiferous copper ore the silver is readily dissolved by our iron bath, from which it may be precipitated by filtration through spongy copper, as in the process of Augustin. Further trials, made with rich regulus containing gold, have shown what might be expected—that the residue, after the extraction of copper and silver by our bath, contains the gold in a condition favourable to removal by chlorination. We, therefore, anticipate the best results from the application of the new copper process to gold and silver-bearing copper ores like those of Colorado.

Montreal, March 14.

[For remainder of Original Correspondence, see this day's Supplement.]

Meetings of Mining Companies.

LINARES LEAD MINING COMPANY.

A general meeting of shareholders was held at the offices, Queen-street-place, on Thursday.—Mr. W. Cox in the chair. The report of the directors stated that the profit on the past half-year has amounted to £2544. 14s. 9d., an improvement of 2677. 13s. 7d. over the past half-year to June 30; indeed, it is the largest profit which the company has realised during the past seven years. In previous accounts the outlay on the Quilientos Mine has been treated as an expenditure of capital, but in the accounts now presented the whole of the company's expenditure of whatever kind has been charged against revenue, so that the profit shown is in every respect satisfactory. There has been no movement of any importance in the lead market during the whole of the half-year. The price stood at 18s. 6d. per ton in September, and has continued at that price ever since. Just now, however, the London market is, if anything, slightly weaker for Spanish lead. The profit of £2544. 14s. 9d., added to the amount of undivided profit brought forward, brings up the sum standing to the credit of profit and loss account to £1021. 12s. 3d.; out of this amount the directors have declared a dividend, payable on April 9, which will consume £750l.; and they have again written off as depreciation on machinery, &c., the sum of 500l.—£4250l.: leaving a balance to be carried forward of £596l. 12s. 3d.

The CHAIRMAN moved that the report and balance-sheet be received and adopted. It must be a matter of congratulation to the shareholders, as it was of satisfaction to the directors, that they were in a position to perform the promise which, on the part of his colleagues, he made at the last meeting of declaring a dividend of 5s. per share, and it was now in his power to promise a similar dividend on September 29. The amount of profit realised during the past half-year was the largest the company derived for some time past, but beyond this they had expended not less than 3000l. upon explorations in the Quilientos Mine, where they had now 700 tons of ore in reserve. For his part he believed that they were now entering upon a new phase in this company, and that the explorations and discoveries now being made at this new Quilientos Mine would restore the Linares Company to its most prosperous days.—Mr. BRAND seconded the proposition.

Mr. JOHN TAYLOR had watched this mine with great care and interest for many years. He believed if they were not backed up by the industry, economy, and zeal of their managing agent (Mr. Tonkin) they would not be able to realise the results as shown in the report. He believed the success of these three companies was due to the simple fact that a large outlay was continually being made in extending and renewing the underground works, hence it was that no diminution occurred in the "reserves" of ore in the different mines, while they were placed in a position to make good profits. He regarded all mines as temporary, and it has always been his object to extend the time of their termination to as long a period as possible. If the Quilientos Mine should continue to open out satisfactorily for the next six months it would to a great extent replace the results realised from the old mine. The motion adopting the report and balance-sheet was put and carried. The retiring directors and auditors were re-elected. A vote of thanks to the Chairman and directors concluded the proceedings.

FORTUNA COMPANY.

A general meeting of shareholders was held at the offices, Queen-street-place, on Thursday.—Mr. W. Cox in the chair.

The report of the directors stated that the profit for the half-year amounted to £361. 2s. 9d., which, after providing 900l. towards the redemption of the debenture debt, and charging 244l. 12s. for debenture interest, enabled the directors to declare another dividend of 2s. per share. On Dec. 31 there were funds in hand amounting to £5321. 10s. 9d. towards the payment of the debenture debt. This provided for the third instalment of 3500l., which became due on Feb. 19, and was duly discharged on that day, and it has left 1821s. 10s. 9d. in hand towards the final instalment of 3750l., due Feb. 19, 1871. The production of ore has been at the rate of 377 tons per month; this shows but a small variation on the previous six months. The total quantity of ore in reserve still

reaches 9250 tons; the quantities at the respective mines are, however, somewhat different to that reported in September, but a deficiency at the Canada Linares Mine has been fully compensated for by an increase at Saldaña. In the former mine no new tribute ground of much importance has been opened during the past six months, but the mining agents believe that the present half-year will be more fruitful of discoveries. The Saldaña Mine has opened out remarkably well during the whole of the half-year, and the prospects for the future are equally good.

The CHAIRMAN moved that the report and balance-sheet be received and adopted. He explained that the company was for years in great financial difficulties, and when once dividends were commenced and increased, it was always satisfactory to the directors to find that they could be maintained. Some years since they were compelled to borrow 15,000l. upon debentures, the whole of which had been paid out of profits, in addition to the dividends which had been paid to the shareholders. They had now only 3750l. to extinguish the whole of the debentures, of which 800l. had been already redeemed. He looked forward to the day, if the mine maintained its position, when the directors would be able to declare much larger dividends than 2s. per share.—Mr. PELL seconded the proposition.

Mr. JOHN TAYLOR explained the position and prospects of the different mines, stating that they were amply provided with machinery. There had been a considerable outlay of revenue in opening the mines, in order to maintain the returns; and he might say that the concern was in a very satisfactory condition. The motion adopting the report and accounts was put and carried. The retiring director was re-elected, and Mr. Pell was elected director. A vote of thanks was passed to the Chairman and directors, which concluded the proceedings.

ALAMILLOS COMPANY.

A general meeting of shareholders was held at the offices, Queen-street-place, on Thursday.—Mr. J. P. JUDD in the chair.

The report of the directors stated that no very important discoveries have been made since last meeting, but the mines have continued to yield a good return of lead ore, and promise for the present half-year an equally favourable result. The raisings of lead ore have amounted to 1580 tons, an increase of 80 tons over the previous six months, and it is satisfactory to find that the superintendent has been enabled to return this quantity without diminishing the ore in reserve. The profit shown on the six months' working amounts to 4593l. 4s.; this is a larger sum than the company has made in any previous half-year, and is especially satisfactory in view of the low prices which have been obtainable for pig-lead. The amount standing to the credit of the profit and loss account has again enabled the directors to declare a dividend of 2s. per share, and to write off 500l. from the account, "outlay on mine works."

The CHAIRMAN moved that the report and balance-sheet be received and adopted. The only feature that really required one moment's consideration was the fact that the deeper levels were hardly so productive as formerly. There was, however, a vast quantity of ground to explore, and there was every prospect that the results of the current half-year would be equal to the past. The mine, on the whole, was going on most prosperously. The directors had been able to declare a dividend, and there certainly was no reason to suppose that they would not be able to declare another in the autumn. Everything, however, depended on the price of lead. Mr. BRAND seconded the proposition.

A SHAREHOLDER drew attention to the mines' cost and smelting charges. Mr. JOHN TAYLOR explained that the smelting charges were less than they ever had been, while the mine's cost was remarkably low. He was sure the mine was worked with every economy. It was to be remembered that the mine had to be charged against revenue. He had placed his faith in this mine upon its extent, there being ground sufficient to give them returns for many years to come, even if the ore did not extend in depth, which at present was a problem. He looked forward to their being able to maintain sufficient returns to leave a large profit. In other words, to maintain their profits and keep up the reserves.

The motion adopting the report and balance-sheet was then put and carried unanimously. The retiring directors and auditors were re-elected. A vote of thanks to the Chairman and directors concluded the proceedings.

LUSITANIAN MINING COMPANY.

The sixteenth annual general meeting of shareholders was held at the offices, Queen-street-place, on Thursday.

Mr. H. REEVE in the chair. The report of the directors stated that the raisings for the past year had been 1436 tons, realising 14,132l. against 129 tons, and 14,329l. in the preceding 12 months. Notwithstanding this increased return of ore, a reduction has been made in the costs to a much larger extent than was anticipated at the time of the last annual meeting, so that the profit from this mine has amounted to 1385l. 13s. 4d., against 728l. 5s. 4d. and 427l. 2s. 8d. respectively in the two preceding years. The profit on the Palhal Mine has nearly covered every expenditure, so that the balance of profit carried forward is still 1145l. 8s. 3d., or within a trifle of what it was in the previous year's accounts. The total amount of capital now called up is 32s. per share. It is hoped and believed that the finances are now placed in such a condition that the business of the company may be carried on in a satisfactory manner.

The CHAIRMAN said that during his visit to the mines he was struck with their favourable position for inexpensive working. The number of persons employed was about 700, and nothing could exceed the good management, nor the excellency of the road which connected the mine with the establishment; and, as the wages of the Portuguese were exceedingly low, it was not easy to find any mines that could be worked under more favourable conditions. It was, no doubt, an unpleasant thing that the profits of one mine should be expended in the development of the other, but at the present moment the Carralhal Mine was not working at a loss; therefore, it was hoped at the end of the year there would be no loss on the side of that mine, and he trusted they would not realise a less profit from Palhal. He moved that the report and balance-sheet be received and adopted.

Mr. JOHN TAYLOR drew attention to the fact that the lode appeared to be improving in the deepest point—Palhal, where there appeared a probability they would have an increased quantity of ore. As to Carralhal, the results had disappointed them, but the quantity of ground yet explored was not very great; and, as it was very manageable, if they could but realise a better price for their produce it would become a good paying mine.

After some further discussion, in which the CHAIRMAN alluded to the liberal manner in which Mr. Pinto Basso, the grantor of the mine, had treated the company in their recent negotiations with him, the motion adopting the report and balance-sheet was received and adopted.

The retiring directors and auditors were re-elected. A vote of thanks to the Chairman and directors concluded the proceedings.

JAVALI COMPANY.

The second annual general meeting of shareholders was held at the offices, 4, Westminster-chambers, Victoria-street, on March 31, for the purpose of receiving a report and balance-sheet from the directors, and confirming the same, or otherwise.

The CHAIRMAN (Mr. A. A. Pollock) said this was a mere formal meeting, required by law, and that in moving the adoption of the report and balance-sheet (seconded by Capt. B. Pina) he should merely remark that the board having, in accordance with a general wish, issued every month whatever information had come to hand from Javali, the shareholders were now enabled to form a clear idea of the actual state and prospects of the mine as the directors were; and he had, therefore, no general statement to make which everyone could not make for himself, but he should be happy to answer any questions which any shareholder should like to ask him. The remittances now covered the expenditure, and last month, though only 10 stamps were at work for 16 days, there was a profit of 100l.

Messrs. Nunneley, H. Sewell, and Frewer having availed themselves of this opportunity, and the Chairman and Managing Director having replied to the questions, the report and balance-sheet were adopted. Mr. Frewer having been re-elected auditor, a vote of thanks to the Chairman closed the proceedings.

HAREWOOD CONSOLS MINING COMPANY.

The first general meeting of shareholders was held at the offices of the company, No. 20, St. Helen's-place, on Wednesday.

Mr. JAMES PEARCE in the chair. The CHAIRMAN said that before proceeding to the formal business of the meeting he would ask Mr. F. R. Wilson, whom he should presently ask the meeting to elect as their secretary, to read the reports of Mr. Josiah Hitchens and Capt. Neill. The facts therein submitted sufficiently indicated the unusually favourable prospects of their mine to render it unnecessary on his part to further advert to them. His opinion, as well as those with whom he had been associated in the development of the property up to the present time, was best shown in the large interest held, believing, as they did, that the time was not far distant when Harewood Consols would prove to be equal to what its indications now foreshadowed. With those few remarks, he would ask Mr. Wilson to read Mr. Hitchens's report, which would be found to fully corroborate, in every particular, that of Capt. Neill.

The report of Mr. Josiah Hitchens (consulting engineer to the Devon Great Consols) stated that the position of Harewood Consols is very favourable, the workings not being more than an eighth of a mile from the River Tamar, with sufficient depth of water for vessels of 300 tons burthen, so that the expense of getting the ore shipped and sent to market would be comparatively trifling. It is also important that the dross are only 1-20th. The actual consumption 800 fms. on the line of the lodes, which, although several in number, as proved in adjoining mines, as yet only one has been brought under trial—the Great Gosan lode. The outcroppings of this great course or gossan formation, or lode, or lodes opened to view some few fathoms to the south of the shaft, exhibit a highly mineralised character. This unusually great formation presents the appearance of being in three different lodes, or main courses, the south one being about 9 ft. wide, and the middle and south ones from 3 to 4 ft. According to their present underlie, they will be together at no great depth. Another gossan lode, similar in character, has been met with in the shaft, the width of which remains to be seen by the deeper sinking. There are gossans (says Mr. Hitchens) ferruginous and oxidised in appearance, without being sufficiently quartzose, as well as others equally objectionable, upon which no end of praises have been bestowed, but they have turned out counterfeits. It being so clear that this gossan formation is not of that class, it affords him much satisfaction, feeling fully justified in stating so, not being too ferruginous nor wanting in quartzose character, but very approvingly constituted—it is such a gossan as very clearly points to a great copper formation under it, requiring no great depth to sink to fall in with; the stronger the lodes the nearer the surface it may be safely asserted they begin to produce ore, the most productive mines in

The ROCHE CONSOLS TIN MINE is an adventure that has lately been taken

HOLLOWAY'S OINTMENT AND PILLS.—Glandular swelling in the throat, neuralgia, rheumatism, pneumonia, gout, lumbago, and other diseases of the throat and chest, and all diseases of sensation, are permanently eradicated by this healing antiseptic and soothing preparation. It is also a perfect remedy for all skin diseases, and every kind of superficial inflammation; they soon lose their angry and painful character under the cooling, corrective, and healing influences of this invaluable ointment. The pills have never been administered, either by hospital or private practitioners, in dyspepsia or other diseases of the stomach, without obtaining results. Holloway's medicine acts in unison, and together are competent to grapple successfully with the majority of mortal maladies, regardless of situation.

THURSDAY.—Active demand for Great Retailack, advanced to 20s, upon an important discovery. Van Consols firm, and East Lovell flat. Great Retailack, 15s to 25s; Van Consols, 3s to 3½; Van, 75 to 80; Prince of Wales, 18s, to 17s. 6d.; General Brazilian, 18s, to 20s; Pacific, 8s to 9½; Australian United, 8 to 9½; West Chilverton, 5s to 57; Tinctorf, 30 to 31; Great Vor, 11 to 12; East Lovell, 24 to 25; Bronford, 4 to 4½; Tankerville, 17½ to 18½. **FRIDAY.**—Market for Great Retailack, 15s to 16s; Van Consols, 3s to 3½; East Lovell flat, 24 to 25; Tankerville, 18½ to 19½; Pacific, 8s to 9½; East Carolan, 4½ to 5; East Lovell, 24 to 25; East Greenville, 2½ to 2¾; Van Consols, 3½ to 3¾; West Maria, 2½ to 2¾; West Chilverton, 55 to 57; West Frances, 37 to 38; General Brazilian, 17s. to 19s.; Australian United, 27s to 28½; Seaton, 25 to 27½.

The 100 west the driving is being carried in a northerly direction; 3 ft. of the lode, however, is exposed to view, composed of quartz, capel, prlan, peach, a little red oxide of copper, and tin ore. In the rise in back of the 100 west the ground is hard, and progress slow. In the deep adit level south the ground is improved, and better progress is being made.

LLYWERNOG.—J. Davis, April 6: The lode in the 62 fm. level, east of the cross-cut, has improved in value during the last fortnight, and it now produces 15 cwt. of lead ore per fathom. The lode in the 62 fm. level, west of the cross-cut, continues to be the same as when last reported on, but I have stopped the engine, and have put the pump to stop the backs of the level, as this may throw some light on the several branches of ore we have here. The stopes in the back of this level, east of the cross-cut, are yielding about the same quantities of ore as when last reported on. The lode in the 50 fm. level, east of the engine-shaft, is looking very promising, and produces now 7 cwt. of ore per fathom.

LOVELL.—J. Nancarrow, April 6: The adit at our present point of operations is quite full. We have put two men more in it, that the water may be let down as soon as possible to commence operations at the shaft, which is now quite ready for drawing. There is some very good looking tin-stuff in the adit. **LOVELL CONSOLS.**—J. Nancarrow, April 6: We have set the north lode to sink below the 12 fm. level, at 12 ft. per fathom; this shaft is perpendicular, and by sinking 12 fms. will get down on the lode; the ground is very congenial for tin. We are clearing the workings below the adit westward, and already see tin in the lode. Our easting in the north-east part of the sett is already rewarded by the discovery of a lode, which contains tin, and looks very promising; we shall sink on this as the water will allow us.

MAES-Y-SAFN.—April 6: In the 370, east of Grosvenor's shaft, there is no change to notice. The 350 west is showing signs of improvement. The 310 east has not changed since last reported. The 310 west is producing a little lead, but not enough to value. The 290, east of No. 3 shaft, has slightly improved. In the winze under the 310, west of Grosvenor's, the lode is producing 2 tons of ore per fathom. The stopes in the bottom of the 310 west are producing 2 tons per fathom. The stopes in the back of the 310 east, on the whole, looking well, the lode being worth 3 tons of ore per fathom for a short length (about 4 yards). The old stopes throughout the mine are poor. The mine is in fork, and the machinery in good working order.

NANTOES CONSOLS.—T. P. Thomas, April 7: Penrhyn: The 36 fm. level, west of Thomas's shaft, is looking very promising indeed, producing a little lead and blende, but not enough to value; from its appearance I hope soon to announce a good improvement. The 26 fm. level, west of ditto, has been poor for the last few days, but to-day the lead is coming in again. Jenkins Jones's stopes, in the back of this level, is producing from 10 cwt. to 12 cwt. of lead ore per fathom, with a little blende. John Hughes's stopes, in the back of ditto, is yielding from 10 cwt. to 12 cwt. of lead ore per fathom, with a little blende. Samuel Williams's stopes, in the back of ditto, is yielding from 12 cwt. to 14 cwt. of lead ore per fathom. We have commenced sinking the winze below the 26 fm. level, but there is not sufficient done in it to report on its produce this week. The stopes in the back of the 16 fm. level, west of ditto, is yielding from 7 cwt. to 8 cwt. of lead ore per fathom. **WELSH OWY.** We are still cross-cutting north in the 50 fm. level, on the south lode, and have cut through several branches containing lead, spotted with copper, but we expect the main part is still ahead of us. We have completed the repair of the Ffrwdwen Pond, and we shall now proceed with the Pwllglas. I have enclosed bill of lading of the oresold to Messrs. S. M. Nevill, and Co.

NEW CROW HILL.—A. Kent, T. Trelease, April 5: Our operations at the engine-shaft continue to progress in the usual way, as fast as the nature of the work will allow.

NEW PEMBROKE.—F. Puckey, J. Puckey, April 4: The sinking of the new engine-shaft is nearly completed to the 75 fm. level. We are now busy fixing the pitwork, bobs, &c., and are making preparations to get the 80-in. cylinder engine to work as early as possible. In the 75 fm. level, east of the shaft, the south part of the lode is 5 ft. wide, and worth for tin 181. per fathom. The lode in the rise in the back of the same level, behind the end, is 4 ft. wide, and worth 161. per fathom. In the stopes in the back of the 75 fm. level, east of the shaft, the lode is 1½ ft. wide, and worth 71. per fathom. In the stopes in the back of the same level, further east, the lode is 2 ft. wide, worth 81. per fathom, and looking promising for improvement. In the 68, or middle level, the lode in the end driving east is 4 ft. wide, and worth for tin and copper 201. per fathom. In the stopes in the bottom of the 68 fm. level, west of the winze, the lode will average full 5 ft. wide, and is worth for tin and copper 201. per fathom. The lode in the stopes in the back of the same level, east of the winze, is 6 ft. wide, and in places producing rich work for copper, worth full 801. per fathom. In the 60 end driving west, east of the shaft, the south lode is large, but unproductive. In the 60 cross-cut driving north, east of the shaft, the ground is favourable for progress, and we expect to intersect the north lode in the present month. The mine throughout is still looking very well, and all our operations are being forced on as rapidly as possible.

NORTH CROFTY.—Joseph Vivian and Son, William Thomas, Jun., April 7: We are making good progress in sinking the engine-shaft under the 208, in a lode of a promising character. In the 208, west of Peterick's shaft, the lode has improved, both in size and composition, and is now worth 101. per fm. The eastern side in the back of this level, is worth 231. per fathom, and the western side 201. per fathom. In the 193 west the lode is worth 201. per fathom. In the winze sinking under the 150 west, on the south part of the lode, is worth 181. per fathom. We shall sell about 16 tons of tin to day.

NORTH POOL.—J. Vivian and Sons, F. Clymo, April 7: In the 40, east of Ballarat shaft, we have a considerable improvement, the lode being now 2 feet wide, and producing 3½ tons of yellow copper ore per fathom; it looks like the commencement of a valuable deposit of ore.

OLD GUNSLAKE.—F. Phillips, April 6: The lode has somewhat changed its course since my last, underlying north faster than before. I think it is quite as large, but carrying more capel. I regard the change as temporary, and have no doubt but that it will soon resume its proper course; 2½ feet have been sunk. Cross-cut: The ground still remains stiff for driving, consequently our progress is not so good as I could wish, but we are still meeting with spots and stains of ore in the cross-course, and think we are near the lode; 3 ft. have been driven this week.

OLD TREBURGETT.—Wm. Hancock, April 5: The engine-shaft is communicated to the adit level, el-tern-plat cut, and we have managed to sink 5 feet below for a fork, and bearers to carry the pitwork. The shaftmen are now engaged fixing the bearers, &c., to carry the pitwork; when completed they will properly secure the shaft from adit to surface, and divide it, and fix permanent footway, so as to be in readiness to receive the pitwork as soon as the capstan and shears are erected. The boiler pole, and several other portions of the engine, are still continuing to be delivered on the ground. The stopes in the back of this level, both east and west of cross-course, are each yielding 9 cwt. of black tin per cubic fathom; the lode is 2 fms. wide. The ground in the 120 north is favourable for driving, and good progress is being made. Should no change of underlie intervene we may expect to intersect the north lode in about 1½ m. further driving. The ground in the 100 east is favourable for rising, and the lode producing stones of tin. Cobblers: In the rise in the 120 fathom level, west of the ground is still hard for rising; the lode is producing stones of tin. The value of the north end in the 90 west has again fallen off, and it is now unproductive, although the lode has a promising appearance, and is letting out much water. In the 80 east the lode is worth 201. per fm.; in the 80 west, 101. per fathom. The lode in the 60 east is not quite so good as it has been, now worth 301. per fathom. The lode in the 60 west is worth 301. per fm.; in the 55 east, 151. per fm.; in the 55 west, 251. per fm.; in the 47 east, 81. per fm.; and in the 47 west, 151. per fathom. No other changes to report.

PENALLT.—G. Gifford, April 2: I beg to hand you copy of tutwork setting for April month, with report of the mine. No. 4 cross-cut is extended 20 ft. 1 ft.; the present end is very wet, which indicates we are near intersecting the lode; re-set to drive by six men, at 51. 10s. per fathom. The cross-cut is extended 12 ft. north from the bottom of the winze, in which the lode produced silver-lead ore of good quality; re-set to drive by six men, at 91. per fathom. The level to drive west of No. 1 cross-cut by six men, at 111. per fathom; the north part of the lode, on which we are now driving is yielding 201. worth of silver-lead ore per fathom. I hope by the latter part of next week to have the foundations complete for the wheel and crusher, when we shall push on building stairs, &c., with all possible dispatch.

PENHALE WHEAL VOR.—W. H. Martin, April 6: The sinking of the engine-shaft below the 120 is progressing satisfactorily, and the ground is without any material change. The cross-cut driving north at the 120 is letting out more water, which in my opinion is coming from the lode; the ground is just as last advised.

PRINCE OF WALES.—J. and W. Gifford, April 6: In the 77 east the lode is still improving in size, being now 4½ ft. wide, yielding a little silver and looking very promising end. In the 77 west we are driving by the side of the lode. In the 65 and 55 west we are also driving by the side of the lode. In the 55 east the lode is 1½ ft. wide, principally capel and gossan. In the 55 west, on north lode, no lode has been taken down since last report. The stopes in the back of the 65 east is worth 81. per fathom. A stopes in the back of the 65 west is worth 81. per fathom. A stopes in the back of the 55 east is worth 121. per fathom. A stopes in the bottom of the 55 east is worth 81. per fathom. The rise against the new shaft is progressing very favourable. No change in tribute department.

PRINCESS OF WALES (Calstock).—T. Foote, G. Rickard, April 6: The sinking of Harris's engine-shaft is going on after the rate of 3 ft. per week, and the ground is still containing branches of peach, friable spar, and spotted throughout with yellow and grey copper ore, dipping north towards the great gossan lode, which we regard as favourable indications for meeting with good results at the 50.

REDMOOR.—F. Bennetts, April 7: There is no change to notice in the winze sinking below the 25, worth 151. per fathom. The lode in the stopes east of the rise is worth 61. per fathom. The lode in the stopes west of the rise is worth 51. per fathom. The lode in the stopes east of the cross-cut, in the back of the 25, is worth 61. per fathom.

REPERRY.—T. Parkyn, April 7: The lode in the 15 east has improved this week, and is yielding rich tin. The lode in the 15 west is without change, yielding good work for tin. I sent on to the mine yesterday which was taken from the west end in the bottom of the level; its weight is 8 lbs., and it is nearly solid tin. We have a very fine lode gone down in the bottom of the level. The four stamps heads are still at work, and the tin coming from stamps is very satisfactory; but I would recommend you to stop the stamping with this little steam-engine, as the 2 tons of tin sold from these four heads in three weeks is enough to show you how rich the lode must be for four heads to stamp in so short a time. I should recommend you to sink the present shaft, and stop the stamps until the large engine is set to work, when I believe you will have a very rich mine; indications warrant this opinion, with the result of the sales of tin, &c. Mr. John Hocking, of Redruth, was on the mine yesterday, and we planned down the engine-house, boiler-house, &c. I beg to say that Mr. Hocking, the engineer for the company, was highly pleased with the prospects, and he was surprised to see such rich work so shallow as 15 fathoms.

ROADING WATER.—H. Thomas, April 2: Since Tuesday last a considerable quantity of good looking spar has made its appearance in the south side of Grady's lode at the 45, west of William's shaft, which I look on as a favourable indication, particularly so as the ore made is a similar nature to the west of the present end. At the 28 the lode is certainly undergoing a change, and from appearances no doubt for the better. I regret to say that we cannot make more progress, but from the tangled nature of the ground, and the wetness of the end, we cannot possibly do more than is being done. The men are relieving in place of work, therefore no time is lost. I do not think we shall drive more

than 10 or 11 ft. this month. However, I hope we shall soon have better ground, to enable us to make more rapid progress.

SOUTH CROFTY.—J. Vivian and Son, H. Abraham, April 6: In the 82 fm. level, cross-cut south, west of King's shaft, we are letting down a great deal of water, which is completely draining the 71 and 61 fm. levels for a length of 40 fms.; and we think, therefore, that the south and main part of the lode which we are now cutting into in the 71 fm. level is near at hand. In the 71, west of King's shaft, we have cut 3 ft. into the south part of the lode, which is very hard limestone of rich quality, and it is continuing further south as good as it has ever been; the value of this part of the lode, as far as seen, may be estimated at 501. per fathom. In the 61 fm. level, west of King's shaft, the lode has improved, now 3 ft. wide, and worth 81. per fathom. In the 61 fm. level, west of King's shaft, the lode is 1½ ft. wide, and worth 81. per fathom. In the same level, west of Vivian's shaft, the lode is 1½ ft. wide, and tiny. In the same level, west of King's shaft, on No. 1 north branch, the lode is 2½ ft. wide, and worth 101. per fathom. The tin stopes, on the whole, are improving in the quality of the limestone, which enables us to calculate on increasing sales of tin.

SOUTH MERLILYN.—April 7: Vickers's Shaft: In the 80 yard level, driving north from this shaft, we have to-day got into the ground about the winze sunk by former workers from the 60, The men are now busily engaged clearing, when this is done we shall be able to report fully. In the 80 yard level, south of same shaft, we have had during the week some large stones of lead, one weighing 20 lbs. We must push on this end as fast as possible; the lode is of the most kindly character.—Ruddall's Shaft: In the 60 yard level, driving north from this shaft, the ground has become more favourable for progress.

SOUTH PLYMOUTH.—John Walters, April 6: Our general setting-day was on April 2, the first Saturday in the month, and I set the cross-cut driving north towards the shaft, by four men, at 41. 15s. per fathom. There is no change in the shaft since last report. The weather is very favourable for the surface work, and in that department we are proceeding satisfactorily.

SOUTH VAN.—J. Richards, April 8: The lode driving east is very large and well defined, and is composed of carbonate of lime, blende, and spots of lead and copper ores. I should strongly advise the commencement of the engine-shaft at once, as the weather is very favourable, and no doubt could be sunk from 10 to 15 fms. by manual labour, so that we should be in readiness by the time the wheel was completed.

SOUTH WARD.—T. Foote, April 5: I was at the mine yesterday, and beg to report satisfactory progress making in clearing and cutting down the engine-shaft. The shaft is about 10 fms. deep, and the back of the old men's level can be seen. In a few days we hope to be able to examine it. The drawing-machine is working well, and the surface work now nearly completed.

STAYE PARK.—J. Thomas, J. Cook, April 7: There is no alteration of importance in the mine since the last report. The lode in the 283 east is worth 181. per fathom. The engine-shaft under the 283 is a little improved, but the ground is becoming softer, which is not favourable for permanent productiveness. The lode in the 265 west is hard, but not producing tin enough to value.

TANKERVILLE.—Arthur Waters, April 5: We shall have 100 tons of lead ore ready for sampling on Thursday next, and unless I hear to the contrary, shall offer the stuff in two lots, of 50 tons each. The ore is all of the same quality, but my experience has been that two 50 ton lots bring a greater competition than one lot of 100 tons; if you think to the contrary, please let me hear from you in time to carry out your wishes. All the places in operation are quite as productive as when I wrote my monthly report.

TREVEDDOR.—Captain Rouse, April 5: For many years this mine has been worked as an open quarry on a very large course, with tin thinly disseminated throughout. At present the lode in the bottom is becoming better defined, and is producing work for tin, worth 1 cwt. of tin per ton of stuff. And also very large stones of grey copper, and in precisely the same character as it is in the Van Mine, where it makes the large body of lead. I am fully expecting to cut into a course of ore in the driving of this level shortly, which will give us good backs to work away. I have this day sent samples of the lode broken from the end to the company's office, and they can be seen there.

WEST BASSETT.—G. Lightly, April 6: In the 124 cross-cut north the lode is worth about 301. per fathom for tin. In the 114 west, on the caunter, the lode is worth 51. per fathom for tin. In the 75 west, on Hamby's, the lode is worth 81. per fathom for tin. All other points continue much the same.

WEST CARADON.—W. Johns, N. Richards, April 6: Clymo's lode, in Marina's shaft, below the 55, will produce near 1½ ton per fathom. The cross-cut at this level, north towards Allen's lode, and as well the 42 south to Jope's lode, we are pushing on with all speed. The 42 west, on Allen's, we are going on by the side of the lode. The 42 east is very much improved, worth in the bottom of the end 1½ ton per fathom. The lode in the winze below this level is making a splice. The stopes in the back of No. 1, 2 tons; No. 2, 3 tons per fathom. The winze below the 55, will produce 1 ton per fathom. The 27, west of Crouch's shaft, is worth 1 ton per fathom.

WEST CWM ERFIN.—April 5: In the adit level, going east of engine-shaft, the lode is 4½ ft. wide, composed of spar, carbonate of lime, blende, and clay-slate, with nice strings of lead ore, altogether presenting a very favourable appearance. In the cross-cut, north from the adit level, the ground is still rather hard for exploring, and no change to remark.

WEST JEWELL.—John Mayne, April 7: I have put nine men to clear and repair the engine-shaft, and will intersect the quarry tin lode, about 50 fms. from surface. At this shaft we propose to erect the engine, as it is sunk to the east of Odgers's cross-course, where there will be 70 fms. to drive on the lode to the county cross-course. In all the neighbouring mines the lodes have proved very productive between cross-courses. I have also put six men to sink a shaft to cut the south tin lode, which we calculate to reach about 10 fathoms from surface, and then sink on its course, which we hope to do in a fortnight. This level, on the whole, is looking very productive, where they have to drive from the surface to the 30 upwards of 40,000, worth of tin. We have ten pairs of tributers working in back and bottom of the shallow adit, on the south quarry tin lode, about 50 fms. from surface. I am pleased to say the pitches are all looking well, and the tin-stuff they are breaking is equal to that which was sold on Thursday last; this lode has not been cut below the deep adit.

WEST MARIA AND FORTESCUE CONSOLS.—Wm. Skewis, Jas. Donnal, April 7: West Maria Lode: Willesford's shaft is commenced sinking below the 71, and is nearly ready to drive. The lode in the 131 east is worth 101. per fathom for tin. The north or main part is being taken down, but not yet cut through; so far as seen it is a good ore lode, and the value will be given when properly laid open. The 71 fathom level west is being driven by the side of the lode. The lode in the 60 east has a much better appearance than for some little time past; it is now worth 351. per fathom, and the prospects very encouraging for an important improvement. The lode in the 60 winze, sinking in bottom of this level, is a splendid course of ore, and worth fully 101. per fathom. There is a large stopes in the back of the lode in the 351. per fathom. The lode in the stopes west of No. 1 winze, west of shaft, is worth 551. per fathom. No change in any other part of the mine.

WEST PRINCE OF WALES.—J. Gifford, March 7: I have set two men to work in clearing and securing the deep adit west on the south lode; I hope to commence driving the same some time next week.

WEST TANKERVILLE.—A. Waters, April 6: Your favour of the 5th inst. is to hand. I have been all over the mine here to-day, and things are progressing favourably. We have cleared the adit for nearly 300 fathoms, and are now getting through a choke, which will, I hope, be removed this week, and admit of our going forward to the engine-shaft. We have fixed wheel, blocks, &c., are heaving out piston and cylinder, and hope to have all the parts of the engine in need of repair sent to the foundry this week. I have agreed with Mr. Daniel that a new boiler should be ordered of the firm introduced by Mr. Charlton. The wheel adit is cleared up to and beyond the old shaft.

WEST WHEAL FRANCES.—J. Thomas, C. Craze, A. Babbington, April 7: The winze under the 95 is holed to the 120, and the 120 west is looking well, being worth 121. per fathom for tin. All other points continue much the same.

WEST WHEAL TOLGUS.—April 6: South Lode: The shaftmen have nearly completed the alteration in the pitwork, and repairing the wheel, and will be ready to begin to sink in a few days. In the 105, east of Taylor's shaft, the part of the lode carrying is yielding 3 tons per fathom, worth 111. per fathom. In the 105, west of Taylor's shaft, the lode is 2 ft. wide, producing stones of ore, but not to value. The rise in the back of the 105, where a part of the lode is being carried, yields 2 tons of ore per fathom. The rise in the back of the 95 is 1½ ft. wide, and worth 101. per fathom. In the 85 east, the lode is 2 ft. wide—poor. In the 65 west the lode is 2 ft. wide—poor. In the 40, east of Wheal Raven shaft, the lode is 2½ ft. wide, unproductive. There is no alteration in Richard's shaft. We have five stopes working in the back of the 105 and 95, yielding on an average 3½ tons of ore per fathom.

WEST WHEAL TREMAYNE.—S. Roberts, April 5: In the 20, west of Sutton's shaft, we have no change to report in either lode or ground since last week; a kindly lode, producing good stones of copper ore.

WHEAL TOLGUS.—James Lee, April 6: The 102, east of the 102, is looking well, and producing tin, but not in sufficient quantities to value; we are sinking this shaft by six men, at 261. per fm. The 102 is driven east of this shaft 7 fms. 3 ft.; the lode in this end is 4 ft. wide, producing tin and good stones of copper ore; driving by six men, at 201. per fm.; the object of driving this end in such hard ground is to cut the cross-course, which, judging from its underlie in the 80, we ought to have reached ere this. Some time since we commenced to sink a winze on the cross-course below the 80, and after having sunk it 4 fms. we have had to stop for the water. During the last few days the water in this winze has been drained by the 102, so that we expect we are now very near the cross-course in that level (the 102); the price for driving on the cross-course in the 80 has been about 21. 10s. per fm., so that the north lode will be reached both expeditiously and cheaply; this will be a very important point. The 80, driving west on the north lode, is 6 ft. wide, producing copper and tin, but not enough to value.—Stevens's Shaft: The 92 east is producing some good work for tin; in the last meeting we have sunk a winze from the 80 to the 92, which has yielded 1½ ton of tin, at 111. per fm. We have set a pitch from this winze at 7s. 6d. in it. The winzemen are now employed putting in penthouse, taking up water in the level, and getting in working course for sinking Stevens's shaft below the 92, where I am happy to say we have a lode 8 ft. wide, and worth 301. per fm. for tin. We shall lose no time in pushing on the sinking of this shaft, as it is a most important point, and may lead to very considerable results. There are 40 men working on tribute, at an average of 10s. in it, at a standard of 601. per ton for tin. Some of our stopes having fallen off in value, and the same on tribute, and, having made a considerable reduction on our working expenses, both underground and at surface, our loss will be very much reduced for the ensuing four months.

WHEAL COURTENAY.—J. Gifford, April 7: In the deep adit west the lode is 1½ ft. wide, composed of capel, quartz, and sulphuric mudde, with ground favourable for progress.

WHEAL GOREB.—J. Goldsworthy, April 6: In the 117, driving west of Kelley's shaft, the lode is cut throughout; the same is full 5 ft. wide, composed of capel, mudde, priau, and quartz, producing occasional stones of copper ore, and promising. In the 120, east of Cock's shaft, in the cross-cut driving north and south, there has not been anything of importance met with this week. In the rise in the back of the 95, east of Cock's shaft, the lode is 4 ft. wide, producing 2 tons of copper ore per fathom. In the 95 cross-cut, driving south, there is an

increase of water from the end. There is a favourable indication of nearing a branch or lode. In the winze sinking below the 84, east of Cock's shaft, the sinking is continued by the side of the lode. The tribute pitches are producing fair quantities of copper ore. We are pushing forward the dressing as fast as possible.

WHEAL FRANCO.—W. Doldge, April 5: Sutton's Shaft: This shaft has been sunk during the past month 5 fms. 2 ft., where now 11 fms. 3 ft. deep; the shaft has reached the footwall of the lode, where I am pleased to say it presents a more promising appearance, and producing more ore than in any other part; the lode is about 5 fms. wide, composed of capel, gossan, peach, quartz, and stones of black and yellow ore; altogether a very good, kindly lode; re-set to sink on its course 3 fms., at 21. 10s. per fm.; this lode's bearing is about 5° north of east. The adit level has been driven about 15 fms.; re-set 6 fms., at 21s. per fm.

WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, April 2: The lode in the 110 east is 2 ft. wide, stamping work. In the 100 east the lode is 4 to 5 ft. wide, worth 101. per fathom; from the appearance of this end we think we are close upon a good bunch of tin. The lode in the 90 east is worth 181. per fathom. The lode in the 68 east is worth 81. per fathom. In the 60 east the lode is 3½ ft. wide, and worth 101. per fathom. In the 54 east the lode is worth full 101. per fathom. In the 66 west the lode is 3½ ft. wide, worth 81. per fathom. The new lode in the 50 west is worth 281. 10s. per fathom; in the bottom of the level we believe the lode is worth 451. per fathom, and after we have driven this end a little further we shall be able to sink a winze through this ground. In the 80 east we are driving by the side of the lode, which will be taken down next week, when you shall be advised of its value. In the 66 cross-cut for the new lode the men have already driven 2 fms., the ground being much easier than we had anticipated, and we continue as at present we shall cut the lode in three weeks. — G. R. Odgers, W. Bennetts, April 7: We have taken down the new lode in the 40 east and west, and found it worth 281. 10s. per fathom in each end. From the underlie and general features of this lode we are persuaded there is another lode to the north of this level. The men are making good progress with the 60 cross-cut for the new lode. There is no change in any other part of the mine. We hope to sell a good parcel of tin on Monday next.

WHEAL KITTY.—(St. Agnes).—S. Davey, Wm. Polkinghorne, April 2: New Shaft.—Fry's lode: The shaftmen are making good progress in the sinking of this shaft below the 106. In the 108, driving west of this shaft, the lode is much the same as last reported, worth for tin 151. per fathom. In the 104 fm. level, driving east of shaft, the lode is 2 ft. wide, worth for tin 151. per fathom—a very promising looking lode. In the 94, driving west of shaft, the lode is 3 ft. wide, worth for tin 141. per fm. In the 84, driving east of shaft, the lode is worth for tin 61. per fathom. In the winze sinking below the 94, west of shaft, the lode is worth for tin 161. per fm. In the 82, driving west of shaft, the lode is 4 ft. wide, worth for tin 111. per fathom. In the 82, driving east of shaft, we have met with a cross-course, which has again disordered the lode.—Old Lode: In the 82, driving west of Holgate's shaft, the lode is worth for tin 41. per fathom.—New Lode: No alteration worthy of remark has taken place in the lode during the week.

WHEAL MARGARET.—W. Hollow, April 4: Foul Lode: The 70 fm. level is driving east by two men, at 68s. per fathom; lode 3 ft. wide, of low quality stuff. The 40 is driving east by two men, at 70s. per fathom, lode unproductive. The 20 is driving west by two men, at 90s. per fathom, lode worth 61. per fathom; this level is driving east by four men, at 80s. per fathom, lode worth 121. per fathom. There are six men driving a cross-cut south at the 50 fathom level, to intersect the south lode, at 111. per fathom. Four men are clearing and securing levels, &c. There are seventy-two men on tribute, at an average of 8s. 7d. in it. There is no particular change to notice in this mine. From present appearances the returns of tin in the present quarter will be about the same as in the past three months.

WHEAL MARY ANN.—P. Clymo, J. Harris, J. Stevens, J. Skeat, April 6: Clymo's shaft is sunk 14 fathoms under the 240; the cross-cut in this level is extended 32 fathoms towards the lode. There is no improvement in the 230 north since last reported on. In the same level south the lode is 1 foot wide, worth 51. per fathom. In the 220 south the lode is small and poor. In the 210 north the lode is 1½ foot wide, producing good stones of ore, but not enough to value. The 210 south is at present suspended. In the 200 north the lode is 1½ ft. wide, worth 51. per fathom. In the 190 north the lode is 2 feet wide, worth 41. per fathom. The stopes and pitches continue to yield much the same as for some time past.

WHEAL SPARNON.—W. Tregay, April 2: In the deep adit east the ground is improving, and the lode producing stones of copper ore.

WHEAL UNY.—W. Rich, M. Rogers, S. Coade, April 2: In handing you a report on the operations in this mine during the past three months, we have to state that, owing to the breaking of the main rods at the engine-shaft, in the early part of January, and having had to put in a new cross-wheel and air-pump to the winding-engine, has interfered sadly with our first month's returns; we have, however, surmounted these difficulties, and trust to go on in future without accidents to the machinery. As soon as Hind's engine-shaft is communicated with the 81 (about 90 fms. from surface) we shall dispense with the pitwork at the engine-shaft above the 80; this will be a great relief; we are, therefore, urging on the sinking of Hind's engine-shaft, as well as rising against the same. In the back of the 80; this shaft has been sunk during the past quarter 4 fms. 4 ft.; the first month was chiefly occupied in fixing pitwork and rods. The total depth below surface is now 58 fms. 5 ft. 6 in., and the shaft is now at 191. per fathom. The rise in the back of the 80 is put up 16 fms. 3 ft. 7 in., have risen 4 fms. 2 ft. 4 in. during the past three months; set to six men, at 191. per fathom. The engine-shaft has been sunk 3 fms. since the last general meeting; the first month but little was done in sinking, owing to the accident to main rods, already spoken of. The engine-shaft is 6 fms. below the 160, sinking by eight men. We have been sinking under the lode, but during the past few weeks we have cut into the lode a short distance, and find it yielding excellent work for tin, worth, probably, 201. per cubic fathom; this is a very encouraging feature for the future of the mine, it being the deepest point. The 150 east is extended 14½ fms.; this level has not yet proved equal to expectation, there is, however, a cross-course not far ahead, and a capital lode of tin in the bottom of the 140; we hope to intersect this cross-course, and the shoot of tin very speedily in the 150; we are driving on the end by six men; the lode is worth 101. per fathom, and looks likely to improve. A rise in the back of the 150 east is worth 201. per fathom for the 12 ft. carrier. The lode in the 50 west is worth 101. per fathom, and has a very promising appearance for future improvement. A rise in the back of this level is worth 151. per fathom. The 140 east is being driven by six men; the lode is worth 101. per fathom. We have a hard bar of ground at present, but which we think will soon wear out. We are stopping the bottom of the 140 west, with the view to drain the level, previous to driving the same. We have communicated the winze below the 130 east with the 140; the lode in this winze is worth 151. per fathom. The 130 east has been driven by six men during the past three months; the lode has been worth on an average by nine men per fathom. We are now rising the back of this level against Gooding's shaft; the lode in the rise is worth 301. per fathom for the length of shaft (12 feet). The 120 east has been extended 7 fms. 3 ft. since the last general meeting, and is now 10 fms. east of Gooding's shaft; the lode in the end is worth 121. per fathom. The 110 east is worth 121. per fathom. We intend to drive the level east; the ground in this direction is whole to surface, and is opening out well. The stopes and pitches throughout the mine are looking very well, and we are keeping the engine-shaft fully supplied. Looking at the east ground, and the improved character of the lode in the 150 west, we have a strong opinion the mine will open out profitably productive when further developed by vigorously sinking and driving. We shall continue to improve the dressing-floors and the hauling gear. During the past three months we have met with several hindrances in raising our tin. In addition to the accident to the pitwork, we had a hard frost for nearly three weeks, during which time it was impossible to carry on the surface operations. We hope to show a more favourable balance-sheet at the end of three months.

PRICES OF MATERIALS.

As charged at the PROVIDENCE MINES during the following months:—

Description.	Nov.	Dec.	Jan.
Common iron	per cwt.	9s. 0d.	—
Hoop iron	—	13 6	—
5-in. patent nails	—	19 0	—
2½-in. ditto	—	20 3	—
Norway timber	per foot	0s. 8d.	0s. 8d.
Red pine	—	1 1	—
M. C. coals (contract) ..	per ton	11 6	11 8
Cardiff coals ditto	12 0	—	—
Best registered candles* ..	per doz.	5 9	5 9
Tallow*	per cwt.	49 6	49 6
Grease*	—	14 0	—
Engine oil*	per gall.	3 11	—
Olive oil*	—	5 0	—
Powder*	per 100 lbs.	53 0	—
Safety-fuse*	per coil	0 4	0 4
Rope*	per lb.	44 0	—
Hemp*	per lb.	0 5½	—
White yarn*	—	—	—

* Delivered free of carriage.

With this week's Journal a SUPPLEMENTAL SHEET is given, which contains: Prof. Smyth's Lectures at the Royal School of Mines—Original Correspondence: Collapse of Tubes in Cornish Boilers; Our Coal Supplies (P. B. Brodie); Utilisation of Refuse Shale (E. G. Buttery); Colorado, and its Mineral Wealth (T. Jennings); Rhenish Prussia, No. VIII.; Mining in Prussia; Rhenish Consolidated Mining Company; Gold in Nova Scotia; Monte Albo Mining Company; Patent Panacea; Metallic Mining (W. Gibson); Gas at the Van Mine; Barytes Mines; South St. Just Tin Mining Company; Shropshire Mining District, No. III.; Mining in Shropshire (J. Richards); Crenver and Wheel Abraham Mines; East Wheel Lovell Mining Company; Virtuous Lady Mine—Foreign Mining and Metallurgy—Foreign Mines Reports—Metallurgical Industry of Cleveland—Patent Matters (M. Henry)—Manufacture of Iron and Steel, &c.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, APRIL 8, 1870.

COPPER.		£ s. d.	£ s. d.
Best selected, p. ton	73	0	0
Tough cake and tile	69	0	0
Sheeting & sheets	76	0	0
Boils	77	0	0
Bottoms	78	0	0
Old (Exchange)	63	0	0
Burra Burra	72	0	0
Wire	0	10	0
Tubes	0	11	0
BRASS.		Per lb.	Per lb.
Sheets	per lb.	8 1/4	9d.
Wire	"	7 1/4	9d.
Tubes	"	10 1/4	11 1/4d.
Yellow Metal Sheet	per lb.	6 1/4	6 1/2d.
Sheets	"	6 1/4	6 1/2d.
SPELTZ.		Per ton.	Per ton.
Foreign on the spot	£19 10	0	0
to arrive	19 10	0	15 0
ZINC.		£24	0
In sheets	0	0	0
QUICKSILVER (p. bottle)	(nom.)	6	17 0
TIN.		£129	0
English blocks	0	0	0
Do., bars (in bria)	130	0	0
Do., refined	133	0	0
Banca	130	0	0
Straits	127	0	0
TIN-PLATES.		Per box.	Per box.
10 Charcoal, 1st qua.	1	6	1
IX Ditto, 1st qua.	1	6	1
IX Ditto, 2d qua.	1	6	1
IX Ditto, 3d qua.	1	6	1
IX Ditto, 4th qua.	1	6	1
IX Ditto, 5th qua.	1	6	1
IX Ditto, 6th qua.	1	6	1
IX Ditto, 7th qua.	1	6	1
IX Ditto, 8th qua.	1	6	1
IX Ditto, 9th qua.	1	6	1
IX Ditto, 10th qua.	1	6	1
IX Ditto, 11th qua.	1	6	1
IX Ditto, 12th qua.	1	6	1
IX Ditto, 13th qua.	1	6	1
IX Ditto, 14th qua.	1	6	1
IX Ditto, 15th qua.	1	6	1
IX Ditto, 16th qua.	1	6	1
IX Ditto, 17th qua.	1	6	1
IX Ditto, 18th qua.	1	6	1
IX Ditto, 19th qua.	1	6	1
IX Ditto, 20th qua.	1	6	1
IX Ditto, 21st qua.	1	6	1
IX Ditto, 22nd qua.	1	6	1
IX Ditto, 23rd qua.	1	6	1
IX Ditto, 24th qua.	1	6	1
IX Ditto, 25th qua.	1	6	1
IX Ditto, 26th qua.	1	6	1
IX Ditto, 27th qua.	1	6	1
IX Ditto, 28th qua.	1	6	1
IX Ditto, 29th qua.	1	6	1
IX Ditto, 30th qua.	1	6	1
IX Ditto, 31st qua.	1	6	1
IX Ditto, 32nd qua.	1	6	1
IX Ditto, 33rd qua.	1	6	1
IX Ditto, 34th qua.	1	6	1
IX Ditto, 35th qua.	1	6	1
IX Ditto, 36th qua.	1	6	1
IX Ditto, 37th qua.	1	6	1
IX Ditto, 38th qua.	1	6	1
IX Ditto, 39th qua.	1	6	1
IX Ditto, 40th qua.	1	6	1
IX Ditto, 41st qua.	1	6	1
IX Ditto, 42nd qua.	1	6	1
IX Ditto, 43rd qua.	1	6	1
IX Ditto, 44th qua.	1	6	1
IX Ditto, 45th qua.	1	6	1
IX Ditto, 46th qua.	1	6	1
IX Ditto, 47th qua.	1	6	1
IX Ditto, 48th qua.	1	6	1
IX Ditto, 49th qua.	1	6	1
IX Ditto, 50th qua.	1	6	1
IX Ditto, 51st qua.	1	6	1
IX Ditto, 52nd qua.	1	6	1
IX Ditto, 53rd qua.	1	6	1
IX Ditto, 54th qua.	1	6	1
IX Ditto, 55th qua.	1	6	1
IX Ditto, 56th qua.	1	6	1
IX Ditto, 57th qua.	1	6	1
IX Ditto, 58th qua.	1	6	1
IX Ditto, 59th qua.	1	6	1
IX Ditto, 60th qua.	1	6	1
IX Ditto, 61st qua.	1	6	1
IX Ditto, 62nd qua.	1	6	1
IX Ditto, 63rd qua.	1	6	1
IX Ditto, 64th qua.	1	6	1
IX Ditto, 65th qua.	1	6	1
IX Ditto, 66th qua.	1	6	1
IX Ditto, 67th qua.	1	6	1
IX Ditto, 68th qua.	1	6	1
IX Ditto, 69th qua.	1	6	1
IX Ditto, 70th qua.	1	6	1
IX Ditto, 71st qua.	1	6	1
IX Ditto, 72nd qua.	1	6	1
IX Ditto, 73rd qua.	1	6	1
IX Ditto, 74th qua.	1	6	1
IX Ditto, 75th qua.	1	6	1
IX Ditto, 76th qua.	1	6	1
IX Ditto, 77th qua.	1	6	1
IX Ditto, 78th qua.	1	6	1
IX Ditto, 79th qua.	1	6	1
IX Ditto, 80th qua.	1	6	1
IX Ditto, 81st qua.	1	6	1
IX Ditto, 82nd qua.	1	6	1
IX Ditto, 83rd qua.	1	6	1
IX Ditto, 84th qua.	1	6	1
IX Ditto, 85th qua.	1	6	1
IX Ditto, 86th qua.	1	6	1
IX Ditto, 87th qua.	1	6	1
IX Ditto, 88th qua.	1	6	1
IX Ditto, 89th qua.	1	6	1
IX Ditto, 90th qua.	1	6	1
IX Ditto, 91st qua.	1	6	1
IX Ditto, 92nd qua.	1	6	1
IX Ditto, 93rd qua.	1	6	1
IX Ditto, 94th qua.	1	6	1
IX Ditto, 95th qua.	1	6	1
IX Ditto, 96th qua.	1	6	1
IX Ditto, 97th qua.	1	6	1
IX Ditto, 98th qua.	1	6	1
IX Ditto, 99th qua.	1	6	1
IX Ditto, 100th qua.	1	6	1

REMARKS.—The amount of business transacted in our markets in metals during the past week continues to be limited. Whatever the distant future may discover, there are at present no indications of much increased activity, and we are rather led to the conclusion that matters may go on as they are for some time to come. As a rule prices are moderate, and while this continues to be so it is not probable that there will be any falling off in the demand.

COPPER.—The market still continues to droop. English has again given way, and there are no indications of recovery, but rather the reverse. There appears to be no buyers, except at considerably reduced rates, and it is rumoured that manufactured has been offered at 73s., and that even this price has not met with acceptance. Notwithstanding the dull state of the market, and the declining prices of English, foreign has been steadily upheld at even a slight improvement upon last week's quotations, the business transacted being chiefly for the previous week. For Chili bars, being 5s. higher than the lowest rates for the previous week. Sales have been neither for large quantities nor have they been numerous; but the slight improvement referred to may be chiefly attributed to the announcement of the last charters being comparatively small—1000 tons only, against the course of a day or two; and should the charters again prove light, a greater strength may be imparted to the market; but owing to the absence of orders for English manufactured this would have very little or any good effect upon the price of this description of copper. On the other hand, if charters should be fully up to the average or in excess, the consequences upon both the English and foreign varieties, but more especially the latter, would necessarily be disastrous, and thus a still more general depression would be created. In Australian no variation in price has taken place. In yellow metal a very fair amount of orders have been executed, but at slightly easier rates—64s., 4 ft. by 4 ft. sheets, ordinary Indian specification. Some of the smelters have conceded to buyers' limits, as their works were wanting orders.

IRON.—Rails have been in fair request, and higher prices have been obtained. Ironmasters have been enabled to realise better prices, and at present nothing under 77s. 6d. can be had, either for prompt or distant delivery. The demand for rails continuing so good tends considerably to stiffen the prices of other descriptions of iron, and some of the ironmasters, finding that rails are in so much better request than bars, have arranged to apply their mills to this purpose. The large amount of work which is in hand, and is likely to be proceeded with with particular reference to the requirements of the Indian Government, and other foreign parts, will probably keep the ironmasters in full employment for some time to come, and also tend to maintain present rates; and it is by no means improbable that higher prices may have to be paid. Merchant bars have been in good request, and most of the houses which were taking orders at the recent comparatively low prices decline effecting further sales, unless at higher rates. As many of the ironmasters, by their late arrangements with reference to the conversion of their mills to railway bar purposes, have reduced their capacity for turning out merchant bars, the orders that come into the market will not be so rapidly executed as before, and the effect of the supply being less than the demand is already being felt in the higher prices that are being obtained.

The price of merchant bars is, as compared with railway bars, certainly too low. The latter are quoted at 77s. 6d. to 78s. 6d. at the works, while merchant bars are only selling at 75s. 6d. in London, showing a difference in value of about 2s. per ton in favour of railway bars, while as a rule merchant bars fetch slightly more than rails. Staffordshire descriptions at present do not evince the improvement which might have been looked for. In Swedish bars no sales have been effected, and the accounts from India having been very favourable the market is perfectly stagnant for the time being. In Scotch pig-iron there has been more speculation, and prices have advanced to 56s., 56s. 6d. There is a much stronger tone prevailing, and it is not improbable that higher prices will be realised.

LEAD.—In pig business has been transacted at 187s. 10s. to 187s. 12s. 6d., and the market is weak at these prices. In manufactured a corresponding weakness is apparent.

QUICKSILVER cannot be bought; holders decline selling any more at present, except very occasionally in the smallest quantities for home consumption. The Spanish Government is still in a very unsettled state, and what their future intentions may be it is difficult to say.

STEEL.—In Sweden there is no change; very little doing. SPETZ.—All speculative feeling seems to have entirely subsided in our market. Although the stock in London is exceedingly small, it produces no effect on the demand.

TIN.—In consequence of the high price (72 1/2 fls.) at which the Banca tin was disposed of at the sale, on March 31, in Holland, and the further advance that has since ensued—up to 76 fls.—there has been great excitement here, and prices have rapidly advanced to 127s. and 128s. The market closes very strong, at 128s. to 129s. cash, 128s. 10s. having been refused for arrival. The diminished stocks, short supplies, and the strength of the present holders, combine to favour enhanced rates. There is also a further rise in the price of English tin. Some of the smelters decline naming a price, not having any tin ready for sale, and the lowest price at which refined can now be purchased, and that very sparingly, would be 132s.

TIN-PLATES.—At present the demand is not so good as was anticipated, but the high value of the raw material will tend to maintain quotations; indeed sellers, having to pay an enhanced price for their tin, cannot possibly afford to sell under present quotations.

THE IRON TRADE (Griffiths' Weekly Report).—The market for all kinds of iron has been steady this week. Small rounds and squares, angles, T-iron, and boiler-plates continue in good demand; nail rods and hoops are likewise required for. The rail trade continues active, the demand for Russia is developing itself quite equal to the most sanguine expectations, and the great makers, particularly in South Wales, are fully engaged on contracts for Russia. The price of rails is advancing; American sections are now worth 77s. at Cardiff, and other sections are fetching as much as 75s. 6d. The "push" for rails during this summer is expected to exceed the pressure on the makers which they experienced for deliveries during the summer shipping season of last year. The disagreement with Mr. Schneider and his colliers is not yet settled. The Birmingham Quarterly Meeting will be held next Thursday, and it is expected

that a large business will be done at this meeting in most kinds of ore, particularly Staffordshire makes. The North Staffordshire Ironmasters have held their Quarterly Meeting; the feeling was favourable to the future prospects of the trade. Tin-plates are in good demand, and the makers hope for better prices soon.—75, Old Broad-street, April 8.

THE TIN TRADE.—Messrs. James and Shakspeare: The demand for English continuing large, smelters have further advanced their rates 2s. on common, 3s. on refined, beyond those demanded by them on the afternoon of the last instant, and being bare of stock, are unwilling to book large orders even at present prices. In foreign sorts a very large business has been done since our last was printed, Straits selling freely from 124s. up to 128s. for spot parcels, and holders are shy of quoting at our list value; in fact, looking at the reduction in the stock which was effected during March, the deliveries of the month (of all kinds) from the port of London having been about 700 tons, many are keeping out of the market, feeling confident that much higher rates than the present must eventually be paid. There has also been a speculative enquiry for arrival parcels, and 124s. to 127s. 6d. paid according to time when vessels were expected, but the earlier dates have obtained the preference, and the highest prices have always been given for those lots due at latest May or early June. Banca has been also largely dealt in here from 126s. to 130s., and there is not much of this quality at present offering. Biliton realised in this market from 124s. to 128s. cash, but arrival lots were dealt in at rather irregular values, and we have not heard of over 126s., and that for some by a ship close at hand.

THE COPPER TRADE.—Messrs. James and Shakspeare:—A few sales of slab have been reported at 65s. 15s. per ton, 66s. and even 67s. 5s. being paid in one or two instances, but there is no disposition to buy largely except at the lowest figure, and consumers are, therefore, supplying their present wants from other sources; about 100 tons for rather distant arrival were taken during the week at 67s. per ton, with this exception, however, that there has been no enquiry on such terms. For Australian there was a demand on Russian account, and a fair quantity of Wallaroo bought at 72s. 10s. to 73s. according to prompt, but as the steamers for St. Petersburg are only just being laid on the berth deliveries have not yet been made out of the stock now accumulating for shipment to that port, and which is estimated to amount to fully 1000 tons. Except in raw descriptions there is not much doing in English, and manufacture of Indian sizes, has been sold at a reduction of 1s. per ton from smelters' official quotation. Yesterday about 1600 tons of ore and regulus were sold at 11s. 1/4d. per unit, part being for Swansea, part for Liverpool delivery. The direct imports from the West Coast of South America into England during March were equal to 3156 tons pure; into Havre, 241; and during the same period 730 tons of foreign copper from other countries entered the port of London, making together a total of 3886 tons. The mails received her from Chili during March advised charters for together 4687 tons, against 5451 tons during March, 1869. During present year 12,768 tons have been advised, against 15,575 in 1869.

In the early part of the week the MINING SHARE MARKET was somewhat affected by another failure in the Stock Exchange, and the consequent closing of a very heavy "bill" account in various speculative mines. A further rise, however, of 4s. per ton in tin, and an improved standard for copper ore, soon gave the market a better tone, and a fair average amount of business was transacted in West Chiverton, Tincroft, Australian United, Van Consols, Drake Walls, East Grenville, Wheel Grenville, Great Retallack, Taquaril, Bwiche, East Lovell, Pacific, Chiverton Moor, Chiverton Valley, Providence Mines, Great Laxey, Great Wheel Vor, and a few others.

The dividends from profits paid by mining companies during the month of March amounted to 47,262l. 18s. Great Laxey (Isle of Man) paid 7500l. for the quarter, or 10s. per share. The market value of the mine is 270,000l.; capital paid up, 60,000l. The Van paid for the quarter 6000l., or 10s. per share; the capital paid up is 51,000l.; market value, 960,000l. South Caradon Copper paid 2560l. for two months' profits, or 5s. per share; the capital paid up, 6400l.; market value, 154,000l. Don Pedro Gold Mine paid 15,232s. 8s., or 4s. per share, making 14s. per share for the year, or 129,951l. on a paid-up capital of 53,313l.; the market value of the mine is 380,810l.

West Chiverton, 55 to 57; Van, 75 to 80. Van Consols, after declining to 3s. leaves off firm at 3 1/2. Tankerville leaves off 13 1/2 to 14 1/2; the mine has sampled 100 tons of lead, the produce of the first month since the present company came into possession. Great Laxey, 17 to 18; the accounts from Aug. 7, 1869, to Feb. 4, 1870, show—the lead sales, 1000 tons, 22,170l.; blende sold, 3368 tons, 13,989l. 12s. 10d.; the stock in hand, 4586l. 12s.; the labour costs, 14,739l. 12s. 2d.; the bills, 3110l. 18s. 3d.; the royalty paid Crown, 2082l. 10s. 10d.; income tax, 625l.; and dividends paid September, 7520l.; December, 6000l.; balance to credit, 6351l. 0s. 1d. The reserved capital account shows 8975l. in hand. The general statement of accounts show balance of assets over liabilities of 15,326l. 9s. 5d. Great Retallack shares have advanced to 1 1/2; a fine discovery has been made in the 50, or bottom level south, worth 2 tons of silver-lead ore per fathom. This is in easy ground, and if it continues for a few fathoms, the agent states, they will be able to work the mine to a good profit. From relinquishments and forfeitures the shares have been reduced to less than 4000, and are, consequently, difficult to obtain.

East Grenville, 2 to 2 1/2; at the 55 the lode in the end is now worth over 5 tons of copper ore per fathom, and the agents are very sanguine that a large body of ore is not far distant. Wheel Grenville, 1 1/2 to 2 1/2; the new lode, in the 80 east and west, has been taken down, and worth 28l. 10s. per fathom in each end. Bronfloyd, 4 to 4 1/2; Bwiche Consols, 3 1/2 to 3 1/2; Chiverton Moor, 5 to 5 1/2; Chiverton Valley, 4 1/2 to 5; Devon Great Consols, 95 to 105; Drake Walls, 25s. to 27s. 6d.; Dolcoath, 13 1/2 to 13 1/2. Providence Mines, 39 to 41; the profit on last quarter was 1614l. 15s. 3d., and 2202l. 16s. 8d. carried forward after payment of dividend of 1680l. There is a good improvement in No. 4 carbons, which can be worked to advantage when a cross-cut has been got in at a deeper level. East Caradon, 4 1/2 to 5. East Lovell, 2 1/2 to 2 1/2; at the meeting a dividend of 2s. per share was declared. East Seton, 25s. to 30s.; Great Western, 1 1/2 to 2. Wheel Basset, 50 to 60; at the meeting, held on the 6th inst., the accounts showed a profit of 1423l. 1s. 5d. on the two months, and a balance against the company of 4877l. 12s. The prospects of the mine are considered favourable. Great Wheel Vor, 1 1/2 to 1 1/2; Hingston Down, 15s. to 20s.; Holmbush and Kelly Bray, 10s. to 20s.; Marke Valley, 6s. to 7; New Lovell, 2 to 2 1/2. North Crofty, 2 1/2 to 2 1/2; the mine sold 16 tons of tin on Thursday.

North Trekerby, 13s. to 15s.; at the meeting, held on the 5th, the accounts showed a profit of 144l. 3s. on the two months, and a balance against the company of 623l. 17s. 7d. The ore sold on March 24, and not credited in these accounts, realised 1224l. 4s. 3d. The agents state that the general prospects of the mine continue good. North Roskear, 6 to 8; Prince of Wales, 15s. to 16s.; Princess of Wales, 5s. to 7s. 6d.; Roswell Hill and Ransom United, 22s. to 25s. Pestarena, 20s. to 22s. 6d.; the directors have received the following telegram:—"580 ozs. of gold obtained during the month of March." This is 154 ozs. in excess of the month of February. Spear Moor, 16 to 18. Tincrofts have advanced to 29, 31. Trumpet Consols, 24 to 25; West Caradon, 14 to 14 1/2; West Frances, 38 to 40; West Maria and Fortescue Consols, 24 to 25; West Seton, 130 to 135; Wheel Agar, 2 to 2 1/2; Wheel Buller, 2 to 4; Wheel Jane, 44 to 46; Wheel Kitty (Lelant), 13 to 15; Wheel Kitty (St. Agnes), 6 1/2 to 6 1/2; Wheel Mary Ann, 13 1/2 to 14 1/2; Wheel Seton, 30 to 35; Wheel Ury, 2 1/2 to 3; Australian United, 3 to 3 1/2; Chontales, 20s. to 25s.; Don Pedro North del Rey, 4 1/2 to 5 1/2; General Brazilian, 17s. 6d. to 20s.; Pacific, 8 1/2 to 8 1/2; Taquaril, 18s. to 20s.

The market for Mine Shares on the Stock Exchange during the week has been in a very unsettled condition, owing to failures of dealers speculating for a rise; the creation of new companies mining for lead, and trading on the success of Van, has resulted in great mischief. Foreign undertakings, and the good, in common with the doubtful, have suffered in the melee. Van shares declined to 77, 79; the fall brought in a large number of buyers, and shares are scarce at quotations; the mine never looked better, and the prospects for cutting a rich lode in the 45, and at the western shaft, are of a high order; the former event may be looked for in a few days' time; the sampling on Monday (for three weeks) will be 325 tons of lead ore and 100 tons of blende; the next sampling will be on a considerably enlarged scale. Sweetland Creek shares are very firm, at 3 1/2 to 4 1/2 prem. Pacific, 8 1/2 to 9; no effort has been spared to depress these shares by unfounded rumours; it should be borne in mind that there is 3s. per share to be returned shortly, reducing the shares to 7s. each, and that at 1 1/2 dis., with a cash balance in hand of about 25,000l., the then price of the company's two mines is small indeed, both of which are profitable, and full of promise. Tankerville shares are firm at the close; Don Pedro shares close 3 1/2 to 3 1/2 prem.; East Lovell shares are flatter; Vor shares have improved; Taquaril and General Brazilian shares are in demand; West Stiperstones shares are steady; Great Laxey shares enquired for. Subjoined are closing quotations: Asheton, 8 1/2 to 9; Chiverton, 1 to 1 1/2; Chiverton Moor, 5 1/2 to 5 1/2; West Chiverton, 54 to 56; East Caradon, 4 1/2 to 4 1/2; Great Wheel

Vor, 11 1/2 to 12 1/2; Great Laxey, 17 1/2 to 18; East Lovell, 24 to 24 1/2; Marke Valley, 6 1/2 to 7 1/2; Tan-yr-Alit, 5 to 5 1/2; Van, 77 to 79; West Stiperstones, 20s. to 25s.; Tankerville, 14 to 15; General Brazilian, 1 1/2 to 2 prem.; Chontales, 20s. to 25s.; Don Pedro, 3 1/2 to 3 1/2 prem.; Frontino, 1 1/2 to 2; Pacific, 8 1/2 to 9; Pestarena, 1 to 1 1/2; St. John del Rey, 21 to 22; Taquaril, 7s. 6d. to 8s. 6d. prem.; Penrhyn, 2 1/2 to 2 1/2; Cae Gynon, 2 1/2 to 3; Sweetland Creek, 3 1/2 to 4 prem.

THE FIEL HEMATITE IRON COMPANY has been established, with a capital of 100,000l., in shares of 100l. each, for the purpose of erecting furnaces, and smelting the richer ores of Ireland, in combination with the hematite ores of the Furness district. It is estimated that the total cost per ton of pig-iron (including all charges on its sale) will be but 27l. 12s. 6d., whilst the present selling price will leave an average at the works of 37l., which it is considered will leave a profit of 15 per cent. per annum. The annual produce of the Furness district is about 900,000 tons per annum, a large portion of which is sent out of the district, instead of being consumed therein with advantage and profit. The works are conveniently situated close to the shipping port and extensive docks of Barrow, and to the harbour of Piel, so that pig-iron can be dispatched and Irish ores received with advantage to the concern. A considerable portion of the capital has already been subscribed, and Mr. E. Talbot will act as managing director; as he had 40 years' experience in the manufacture of iron, he must be well able to judge of the prospects of the enterprise with which he is connecting himself, and shareholders have good security that their interests will be properly protected. Mr. Talbot, sen., was also a manager of iron works nearly the whole of his long life—81 years; he made the first rails that were laid in this country, and continued rail-making for more than 40 years. The Furness district is considered to offer a splendid chance just now, and now is the time to take advantage of it. The market for hematite pig-iron is advancing, and as it is the only class of iron employed in the Bessemer system, it is fully evident that a constant and increasing demand may be relied upon, for it is considered there can be no doubt now that the Bessemer royalty has terminated a great impetus will be given to this special branch of manufacture. The prospectus will be found in another column.

The TUOLUMNE COMPANY closed its list on Wednesday, and the directors will proceed with the allotment forthwith. The shares are quoted 1/4 to 1/2 prem.

At Redruth Ticketing, on Thursday, 1103 tons of copper ore were sold, realising 4285l. 7s. 6d. The particulars of the sale were—Average standard, 94l. 6s.; average produce, 7; average price per ton, 37l. 17s. 6d.; quantity of fine copper, 77 tons 12 cwt. The following are the particulars of the sales during the past month:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
March 3	1306	92	96	7 1/2	24	7
" 17	3258	101	110	6 1/2	3	10
" 24	1854	89	70	8 1/2	4	11
" 31	1900	95	170	8 1/2	3	8
April 7	1103	94</				

Staffordshire bars, 71. 10s. to 81.; gas tubes, 60 per cent. to 67½ per cent. off list; boiler tubes, 40 per cent. to 42½ per cent.—Copper drooping. English tough ingot, 70l. to 71½; Chili slab, 68l. 10s. to 69l.—Tin is excited. English ingots nominally at 198l. to 199l.; Straits 197l. 10s., and higher quotations are anticipated.—Lead firm. Best English soft pig lead, 19l.—Spelter inactive. English, 19l. 10s. to 20l. Silesian, special brands, 19l. 6s. to 19l. 10s.

The Bank of England return for the week ending on Wednesday evening showed in the ISSUE DEPARTMENT a decrease in the "notes issued" of 335,000l., which is represented by a corresponding decrease in the "coin and bullion" on the other side of the account. In the BANKING DEPARTMENT there was a decrease in the "public deposits" of 2,967,759l., and in the "rest" of 287,844l.; together, 3,255,603l.; an increase in the "other deposits" of 168,810l.; and in the "seven day and other bills" of 11,058l.; together 179,868l.—3,375,738l. On the asset side there was a decrease in the "Government securities" of 46,481l., and in the "other securities" of 2,282,181l., together 2,268,829l., leaving a decrease in the total reserve of 1,688,907l.

MONTALBO MINING COMPANY (Limited).—Intelligence has been received during the week from the mines agreed to be purchased by this company, which goes to prove that the yield of ore is in excess of the quantity estimated by Mr. Bewick, the engineer, who examined the mines in December last. The information received by the directors is that from the Guzurra Mine 10 to 12 tons of ore is being raised daily, while the yield from the Su-Ergiolu workings since January last has been close upon 2000 tons, or at the rate of about 20 tons per day; thus taking the number of working days at 260 in the year, the output may be estimated at 7000 to 8000 tons of first-class ore per annum.

GOLD IN CORNWALL.—It is reported that a rich auriferous lode has been discovered in the eastern part of New Crow Hill Mine. Large quantities of rich silver-lead have been raised from parallel lodes, and great results are expected in depth, but the reported discovery of gold has been made upon a lode that has not hitherto been worked.

ROCHE CONSOLS (Roche, Cornwall).—The sett contains some rich tin lodes, which are intersected by an elvan course. Three lodes have been opened upon, and one which is now being driven is worth 30 lbs. of tin to the ton of the lode. It is intended to at once erect a steam-engine and 24 heads of stamps, by which the agent states regular monthly sales of tin can be made at a very low cost, yielding first-rate profits to the shareholders. There are now some thousands of tons of tinstuff at surface left by ancient workers, which Captain Parkyn (the agent) states will leave good profits in stamping. Altogether, the sett would appear to be a very promising one, and to contain every element of success. The mine is situated at the head of the Goss Moors, from which millions worth of tin have been raised.

UTILISATION OF SMALL COAL.

The utilisation of small coal from anthracite has been attended with greater difficulty than has been met with in dealing with the slack from other classes of coal, owing to the liability of the bricks to crumble when placed on the fire, but Mr. H. D'Aligny's report contains some suggestions which may, no doubt, be turned to practical account. He considers there are several methods for agglomerating the anthracite coal alone. He proposes to follow the ordinary process, but grind, mix, and blend the coal and pitch with the greatest care, so that the powders are fine, evenly mixed, and in definite proportions. Practical men believe that kneading and mixing machines do not correspond in excellence to those used for pressing the coal, which are comparatively perfect. If mixing-machines were more thorough in their action the quantity of pitch employed—which is the most costly ingredient, and keeps pressed coal at the present high rates—might be lessened. However, with anthracite, even when the paste is made as homogeneous as, thin, and as well worked as possible, it will be necessary to submit it to a greater pressure than the paste of ordinary coal requires, and to maintain this pressure for a longer time.

These second method for the agglomeration of anthracite which could be tried consists in the process used for manufacturing what is called "Charbon de Paris." The paste made of it with coal tar, with all possible care, and strongly pressed, might be heated in an oven to 300° centigrade, until all the oils are entirely volatilised. The third method consists in making a paste of fine coal dust and coal tar, exposing it to a strong fire until by distillation the tar is altered into pitch in the paste.

The amount required to put to work a first-class colliery capable of mining and shipping 500 tons per day would erect machinery powerful enough to compress even anthracite coal dust to a state almost as solid as when it existed in its bed beneath the mountains, and, perhaps, the amount so consolidated per day would not be less than could be obtained from the mine. Anthracite coal dust can be solidified by pressure without the admixture of any foreign ingredient, but the pressure must be powerful. An admixture of 10 per cent. of wet peat, or of 5 per cent. of fine clay, will help the solidification, and make the blocks more tenacious and durable. The amount of ash or residue would not be greater than that left by the consumption of ordinary coal, since the combustion is more perfect, and no cinders or unburnt embers are left.

But when circumstances will admit, an admixture of 50 per cent. of the rich bituminous coals will make a better fuel, and require no other adhesive substance than the bitumen which the bituminous coal contains, which is brought into an oily state by heat. By mixing half and half of the anthracite dust with fine or pulverised bituminous coal, and pressing them with great pressure in a hot state, the solidification will be complete. But the pressure required is much greater than may readily be imagined by those who have not tried the experiment.

COAL MARKET.—The fresh arrivals this week only numbered 76 ships. The market continued a steady business for all descriptions of coal, at previous prices. Hetton Wallsend, 19s.; South Hetton Wallsend, 18s. 6d.; Haswell Wallsend, 18s. 6d.; East Hartlepool Wallsend, 18s. 6d.; Hartlepool Wallsend, 18s.; Eden Main, 16s. 9d.; Russell's Hetton Wallsend, 16s. 9d.; Harton Wallsend, 16s. 6d.; Hetton Lyons Wallsend, 16s. 6d.; Tunstall Wallsend, 16s. 6d.—Unsold, 4 cargoes: 120 ships at sea.

Mr. J. R. Scott, the Registrar of the London Coal Market, has published the following statistics of imports and exports of coal into and from the port and district of London by sea, railway, and canal during March, 1870:—

By Sea.			By Railway and Canal.		
Ships.	Tons.			Tons.	cwt.
Newcastle	200	114,447	London and North-Western	71,870	13
Sunderland	27	7,331	Great Northern	91,572	13
Middlesbrough	14	8,592	Great Western	46,184	0
Hartlepool	113	36,492	Midland	86,108	0
Blyth	2	822	Great Eastern	49,072	2
Scotch	10	3,790	South-Western	1,962	12
Welsh	10	2,963	London, Chatham, & Dover	24	0
Yorkshire	24	3,102	London, Tilbury, & Southend	34	0
Small coal	3	580	London, Brighton, & Sou. Coast.	13	0
Cinders	4	296	South-Eastern	916	13
			Grand Junction Canal	716	18
Total	558	249,541	Total	347,373	18

Imports during March, 1869 638 254,567 Imports during March, 1870 638 254,567

COMPARATIVE STATEMENT, 1869 AND 1870.

By Sea.			By Railway and Canal.		
Ships.	Tons.			Tons.	cwt.
Jan. 1 to Mar. 31, 1870	820,013	1,922,006	Jan. 1 to Mar. 31, 1870	1,922,006	8
Jan. 1 to Mar. 31, 1869	794,741	736,373	Jan. 1 to Mar. 31, 1869	736,373	4

Increase in pres. year .. 25,272 Increase in present year .. 285,634

THE EXPORT COAL TRADE.—The exports of coal from the United Kingdom amounted in February to 636,733 tons, as compared with 663,665 tons in February, 1869, and 582,227 tons in February, 1868. In these totals the exports made to France figured for 186,825 tons, 160,656 tons, and 153,571 tons respectively. In the two months ending Feb. 28 this year our exports of coal footed up to 1,380,809 tons, as compared with 1,287,312 tons in the corresponding period of 1869, and 1,257,397 tons in the corresponding period of 1868. In these totals the exports to France figured for 376,027 tons, 328,570 tons, and 324,466 tons respectively, so that the consumption of English coal in France would appear to be considerably increasing. The exports of English coal have increased this year to Russia, Sweden, Denmark, Prussia, France, Spain, Italy, and the Brazils; but they have decreased to the

Hanse Towns, Holland, the United States, and British India. The value of the coal exported from the United Kingdom in February was 311,782l., as compared with 332,276l. in February, 1869, and 299,341l. in February, 1868; and in the two months ending Feb. 28 this year 672,344l., against 647,617l. in the corresponding period of 1869, and 655,662l. in the corresponding period of 1868.

TIN IN AMERICA.—It has been officially announced by the Government of the United States that the tin mines of California are the richest in the world. The tin mining lands of California cover a space of 50,000 acres, and 23 openings have been made, from which the ore has been taken in abundance.

FILTERS AND FILTRATION.—It has recently been shown by Dr. Frankland that filtration does not only remove matters mechanically suspended in the water, but comprises also a chemical alteration of dissolved material. In some experiments ordinary London sewage water was purified to such a degree that, in respect of organic substance, it actually equalled in purity the water supplied to London for domestic purposes. A committee has, therefore, been organised for the systematic examination of water filters, and to report fully upon them.

THERMO-PLASTIC PUTTY.—In a paper read before the Civil and Mechanical Engineers' Society, by Mr. R. M. Bancroft, on the renewal of King's Cross Station roof, it was stated the glazing putty used in this roof was that known by the above name, and manufactured by Sir W. A. Ross and Co., of London. It is peculiarly adapted for fixing the glass in roof of railway stations, greenhouses, and other buildings where plate-glass and iron or wood sash bars are used. This putty hardens in a few hours after being used, but will, when exposed to solar heat, be sufficient to cause expansion of the glass and metal, become plastic, and on cooling, again returns to its original firmness, thus preventing the loss by fractures and leakage, which occurs so frequently, in places where the ordinary glazier's putty is employed.

SAFETY EXPLOSIVE COMPOUND.—Mr. P. A. Blake, of Highbury, has invented a new compound (rendered explosive by the aid of a suitable detonating powder or other fulminate), which consists of sulphur and chlorate of potash in the proportions of about two parts of the former to five parts of the latter. The above ingredients may be kept separate if desired in a dry and powdered state, and mixed by passing them together through a sieve in the above proportions when required for use.

CONSETT WATER WORKS COMPANY.

WANTED, OLD or SECONDHAND RAILS, SLEEPERS, and other MATERIALS, including switches and crossings, suitable for the construction of four miles of temporary railway.

Also, TWO LOCOMOTIVE ENGINES, 4 feet 8½ inches gauge; weight not to exceed 20 tons.

Also, THREE HUNDRED SIDE and END TIP WAGONS, 4 feet 8½ inches gauge.

Offers to be made in writing, addressed to Mr. JOHN GLESTONE, Secretary, Consett Water Works Company, Consett, county Durham.

Company's Office, Consett, 4th April, 1870.

THE CRENVER AND WHEAL ARRAHAM UNITED MINES COMPANY (LIMITED).

WANTED, TWO COMPETENT UNDERGROUND AGENTS for these Mines, and ONE SURFACE AGENT.

Applicants should forward testimonials to the Directors, at the offices of the company, 15, New Broad-street, London.

GEORGE H. CARDOZO, Secretary.

RESIDENT MINE AGENT.

WANTED, AN AGENT, of experience in LEAD MINING, to RESIDE AT and TAKE CHARGE OF a SILVER-LEAD MINE in NORTH WALES.

Apply by letter only, enclosing copies of testimonials, and stating terms, to Mr. T. R. COMYN, 31, Threadneedle-street, London.

TO SURVEYORS.

WANTED, a Person to TAKE THE CHARGE OF PLANS of EXTENSIVE COLLIERIES and IRON MINES. Unexceptionable references required.

Apply, in the first place, by letter, to Mr. J. T. GREEN, Mining Engineer, Tredegar Iron Works, Monmouthshire.

WANTED TO PURCHASE, for the GREAT WHEAL LOVELL MINE, WENDRON, a SECONDHAND 60 in. cylinder STEAM ENGINE, with ONE BOILER, not less than 10 tons.

State price, and where to be seen, addressed to Mr. CHARLES BAWDEN, Pol-de-House, St. Day, Cornwall.

AN UNDER MINE CAPTAIN WANTED, to SUPERINTEND the OPENING OUT of an EXTENSIVE LEAD MINE. Must be an energetic and experienced man.

Address, J. H. MURCHISON, Esq., 8, Austinfriars, London.

TO SHAREHOLDERS AND CAPITALISTS.

AN ENGLISHMAN, a Mining Agent of large experience and conservative judgment, now in America, being about to visit Colorado, Nevada, California, Oregon, and Idaho, on business in his own profession, OFFERS his SERVICES to INSPECT MINING PROPERTY, or EXAMINE the FINANCIAL CONDITION of MINING CORPORATIONS, and REPORT upon the same.

For terms, &c., address "B.2," MINING JOURNAL Office, No. 26, Fleet-street, London.

A CORNISH MINING ENGINEER will VISIT the MINING DISTRICTS of COLORADO, NEVADA, HONDURAS, and CHONTALES during the ensuing summer, and is prepared to ACCEPT ENGAGEMENTS for the INSPECTION and SURVEY of MINERAL PROPERTIES in those districts.

Address, "B. S.," MINING JOURNAL Office, 26, Fleet-street, London.

A CORNISH MINING ENGINEER, of considerable experience in Home and Foreign Mining, Gold, Silver, &c., several years in Central America, can speak and write the Spanish language, being about to visit HONDURAS, GUATEMALA, SAN SALVADOR, and other Republics, is OPEN to INSPECT and FAITHFULLY REPORT on ANY MINES or MINERAL PROPERTIES, and is OPEN to ACCEPT the MANAGEMENT of ANY MINE or MINES. Unexceptionable references.

Address, "J. W.," care of Messrs. Pottle and Son, Royal Exchange, E.C.

A MINING ENGINEER, of sound experience in developing and managing Collieries and Iron Mines, is OPEN to an ENGAGEMENT as MANAGER, and can produce first-class testimonials. No objection to go abroad under suitable arrangements.

Address, "A. B. C.," MINING JOURNAL Office, 26, Fleet-street, London.

IMPORTANT TO CAPITALISTS.

THE ADVERTISER is in a position to treat for the DISPOSAL of TWO LEAD MINES, comprising SEVERAL HUNDRED ACRES, adjoining two of the most celebrated mines in Flintshire, requiring only a small outlay to develop their riches.

Apply to Mr. T. M. BAYLEY, 34, Water-street, Rhyl.

TO CAPITALISTS, SPECULATORS, &c.

THE ADVERTISER is PREPARED to SELL or TREAT for WORKING a QUARRY of FELSPATHIC GRANITE, specially adapted for polishing or pottery. He is also in a position to OFFER SETTS of splendid quality CHINA CLAY, and a bona fide TIN MINE, where the ore in reserve is estimated equal to £5000.

For particulars, apply to "D. W. J.," Post Office, Tavistock.

TO PROMOTERS OF PUBLIC COMPANIES, &c.

THE ADVERTISER holds a VALUABLE TRACT of MINERAL LAND, including MINES, containing SEVENTY PER CENT. COPPER and TEN PER CENT. GOLD. He wishes to MEET with RESPECTABLE PARTIES to FORM a COMPANY. The property is situated near a sea-port, and a railway is just being completed in the district.

For particulars, address "South America," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

TO CAPITALISTS, COAL PROPRIETORS, AND OTHERS.

THE OWNER of a CONSIDERABLE EXTENT of MINERAL LAND, producing FIRST-CLASS COAL, is DESIROUS of the CO-OPERATION of ONE or TWO CAPITALISTS to DEVELOPE the SAME.

Apply, for particulars, to JOSEPH SIMPSON, Accountant, 17, Pavement, Finsbury, London, E.C.

COPPER AGENCY for WESTPHALIA, GERMANY, WANTED, by a person who is INTIMATELY ACQUAINTED with BRASS, WIRE, and SHEET MANUFACTURERS. With equal prices, will always have the preference. London reference.

Apply early with full particulars, to "B. K.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

AGENTS WANTED for the SALE of HYDE'S PATENT MINERS' GAS ALARM LAMP. Superior to all other Safety Lamps, in not only detecting gas, but in giving notice when it is accumulating, by the ringing of two alarm bells, and extinguishing its own light simultaneously.

"Its adoption would be as great a step as it would be almost possible to take for the protection of miners."—See The Engineer, Nov. 26, 1869.

Address, J. HYDE AND CO., DUDLEY, WORCESTERSHIRE.

SULPHATE OF BARYTES, of good quality, FOR SALE, f.o.b. at a port in Ireland.

Apply to Mr. PARAY, St. Michael's House, St. Michael's-alley, Cornhill, London.

WANTED, a 40 ft. WATER WHEEL, 3 ft. 6 in. to 4 ft. 6 in. diameter.

Address, stating lowest price and full particulars, to "A. B.," Post Office, Taliesin, Cardiganshire.

MIDLAND RAILWAY.

NEW ROUTE TO AND FROM SHEFFIELD.

THE NEW AND DIRECT LINE OF RAILWAY between SHEFFIELD and CHESTERFIELD is NOW OPEN, placing Sheffield upon the Main Line of the Midland Railway.

AN IMPROVED SERVICE of EXPRESS and FAST TRAINS has been established between Sheffield and London; through carriages by all trains. REDUCED FARES have been put in operation between SHEFFIELD and LONDON (St. Pancras), and other places in the SOUTH and WEST of ENGLAND.

For particulars, see Time Tables issued by the company.

Derby. JAMES ALLPORT, General Manager.

TO CIVIL ENGINEERS.

THE TRAM RAILWAY COMPANY of GREAT BRITAIN (LIMITED) invite COMMUNICATIONS from GENTLEMEN residing in districts where CHEAP RAILWAYS are REQUIRED. OWNERS of MINES, QUARRIES, and BRICKFIELDS will be CO-OPERATED WITH in the CONSTRUCTION of TRAMWAYS. By order.

Office, 9B, New Broad-street, London.

JOHN WILLIAM EARDLEY, MINERAL AND LAND SURVEYOR, AND ESTATE AGENT, OFFICES, No. 4, CORN MARKET, DERBY.

Mr. EARDLEY was for ten years with Mr. Woodhouse, of Derby.

MR. J. J. REYNOLDS, 3 AND 4, GREAT WINCHESTER STREET BUILDINGS, has the following SHARES FOR SALE:—

10 Aberdunant.	10 Kellps.	10 Penhalg.
5 Asheton, £9.	50 East Grenville.	10 Pen'Alit.
50 Australian Unl., £3½.	15 Frank Mills, £3.	25 Prince of Wales, 16s.
20 Bwlch Consols, £3½.	50 Frontino, 17s. 6d.	Rhydallog.
25 Bronfloyd, £4½.	10 Great Laxey, £18.	20 South Condurrow.
10 Badnick Consols.	15 Great North Laxey.	10 South Darren.
5 Chiverton Moor, £5½.	10 Great Rock, £9.	2 Trumpet Consols.
10 Caldbeck Fells.	5 Great Vor, £12½.	10 Tan-yr-Alit, £5½.
10 Chiverton Valley, £7.	10 Marko Valley, £7.	10 Tankerville, £14½.
25 Cefn Consols.	15 New Lovell, £2½.	20 Taguairil.
25 Don Pedro, £4 pm.	20 No. Treskerby, 15s. 6d.	16 Tincroft, £31.
50 Drake Walls, £13½.	25 North Crofty, £29½.	25 Tiverton Lady, £2.
2 Devon Consols, £110.	1 New Seton, £30.	Van.
20 East New Lovell.	2 Providence, £41.	West Stiprestones.
5 East Llewellyn, £25.	10 Pacific, £8½.	

J. J. REYNOLDS strongly recommends his friends to purchase shares in Trevarrack at present price.

MR. J. H. COCK, STOCK AND MINING SHAREDEALER, 74, OLD BROAD STREET, LONDON, E.C.

Fifteen years' experience in Cornwall and London. BUYER or SELLER of Pen'Alit, Asheton, Tan-yr-Alit, New Lovell, Spearn Moor, West Pant-y-Goff, and most of the leading mines.

J. H. C., having visited the Pen'Alit Mines prepared to give information thereon to any of his friends.

Telegrams promptly attended to.

CALDBECK FELS MINES.

THE MESSRS. VERCOR, MINING ENGINEERS, having inspected the above Mines on the 21st February, are prepared to GIVE SOUND ADVICE THEREON.

Shareholders should obtain a copy of their report prior to the adjourned meeting. Fee, One Guinea.

Caldbeck, near Wigton, Cumberland.

CAPTAIN ABSALOM FRANCIS, MINING AGENT, ENGINEER, AND SURVEYOR.

The great success which is attending the opening and working of the Mines in the counties of Cardigan and Montgomery, and the many properties placed at the disposal of Capt. ABSALOM FRANCIS, induces him to offer his services, either to ADVISE, INSPECT, REPORT, or SURVEY, for Mining Companies or private shareholders.

For terms, apply to Capt. ABSALOM FRANCIS, as above.

BUDNICK CONSOLS TIN MINE, 1000 shares only, £4 paid.—TEN SHARES FOR SALE in this promising mine, at £5 each.

Address, W. NYE, Denmark-terrace, Park-lane, Tottenham, London, N.

MINERAL ESTATE FOR SALE, near a EUROPEAN CAPITAL—10,000 acres, freehold—containing TIN and COPPER (now being worked), ZINC, LEAD, &c. Conditions favourable.

Apply to "X. L.," care of A. G. Hope, Esq., Solicitor, 60, Cornhill, E.C.

FOR SALE, BY PRIVATE CONTRACT, FIFTY-FIVE 6-ton COAL WAGONS, in good working order. Will be sold a bargain.

Apply to Mr. WILLIAM FRANCIS FARROW, Abbey-street, Nuneaton.

TO COALMASTERS AND IRONMASTERS.

TO BE SOLD, OR LET ON ROYALTY, the MINE of COAL under about FIFTY ACRES of LAND adjoining a railway.

For particulars, apply to Mr. G. DAVIDSON, Mawley, Cledbury Mortimer, Salop.

LEAD ORES.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
April 1—Minera	100	£12 17 6	Walker, Parker, & Co.	
— ditto	71	12 17 6	ditto	
— ditto	67	12 18 6	ditto	
— ditto	100	12 18 6	ditto	
— ditto	82	12 18 6	Panther Lead Co.	
— ditto	80	13 1 0	Walker, Parker, & Co.	
— Dyllid	40½	12 10 6	ditto	
2—Foxdale (Isle of Man)	100	24 12 0	Burry Port Company.	

BLEND.

Date.	Mine.	Tons.	Price per ton.	Purchasers.
April 1—	Minera	100	£ 4 2 0	Vivian and Sons.
—	ditto	43	4 2 0	ditto
—	ditto	28	3 4 6	ditto
—	ditto	78	3 0 6	Kenrick and Son.
—	ditto	36	3 15 0	ditto

CARGILL MINE sold, on March 30, 110 tons of Blend, which realised £313 12s.

BLACK TIN.

Date.	Mines.	Ts. c. q. lbs.	Price p. ton.	Amount.	Purchasers.
March 31—West Godolphin	3	2 2	£72 10 0	£250 5 0	—
April 2—Wheal Uny	20	1 1 7	75 0 10	1505 15 1	—
6—Wheal Killy	15	12 2 24	77 0 0	1203 18 11	—

The Piel Hematite Iron Company

(LIMITED).

To be incorporated under the Limited Liability Act.

CAPITAL £100,000, IN 1000 SHARES OF £100 EACH
(With power to increase to £150,000 if necessary.)

A deposit of £10 per share to be paid on allotment. Subsequent calls at intervals of not less than two months, to the extent of seven-tenths of the entire capital—the remaining portion to form a reserve.

DIRECTORS.

Lieut. Col. H. RIGG, Cross Rigg Hall, Penrith.
FRANCIS PARKER, Esq., Acorn Bank, Penrith.
JOHN BEATSON, Iron Merchant, Sheffield.
E. TALBOT, Esq.—MANAGING DIRECTOR.

(One more to be added.)

BANKERS—THE LANCASTER BANKING COMPANY.

SOLICITOR—LAWRENCE HOLDEN, Esq., Lancaster.

AUDITOR—H. C. BELOE, Esq., Liverpool.

SHAREBROKERS.

Messrs. H. BAZETT JONES AND SONS, Preston.

Messrs. RIDSDALE AND WAILES, Albion-street, Leeds.

Messrs. WOLFENDEN AND GELL, Corporation-street, Manchester. JARVIS W. BARBER, Esq., 40, Queen-street, Sheffield.

SECRETARY AND ACCOUNTANT—MARDON THOMAS, Esq.

The object in establishing this company is for the purpose of erecting furnaces and smelting the richer ores of Ireland in combination with the hematite ores of the Furness district. The annual produce of the latter cannot be less than 900,000 tons per annum, a large portion of which is sent out of the district, instead of being consumed therein, which can now be done with advantage and profit.

A site for the works has been selected in the vicinity of Piel (adjacent to the iron ore pits, and near to the large establishment of the Barrow Hematite Steel Company), which offers every facility for the successful development of the enterprise. The close proximity of the shipping port and extensive docks of Barrow, together with the harbour of Piel, will enable pig-iron to be dispatched, and the Irish ores to be received, with advantage to the concern. Provision will be made in the Articles of Association by which mining property in the district, and other suitable localities, may be worked by the company. Leases of hematite property, embracing some hundreds of acres, in the Furness and other districts, are now under consideration, with a view to their being transferred to this company on advantageous terms.

A considerable portion of the capital has already been subscribed, and arrangements have been made with a gentleman (who will act as managing director), possessing long and valuable experience, by which every security will be afforded that the capital will be carefully and judiciously expended, and the subsequent working operations be conducted with caution and economy.

The company will be duly incorporated under the Limited Liability Act, by which every shareholder is responsible only for the amount of his shares. It is proposed to place the capital at £100,000, in shares of £100 each; to call up (say) £70,000 (in periodical payments, as may be required), and allow the remainder to form a reserve capital.

The cost of erection of three modern built furnaces, with all requisite appendages, purchase of land, &c., will be £30,000, thus leaving of the called-up capital £20,000 as a working fund.

The cost of making iron will be about £9 12s. 6d. per ton, and the selling price is now £3 per ton at existing works; so that upon a weekly output of (say) 1000 tons on the average (that is, after allowing for the variations of the Iron Market), from three furnaces, good profits will accrue to the proprietors, equivalent to a return, on the average, of 15 per cent. per annum.

The Furness Railway Company, whose main line passes the intended site, have kindly intimated their wish to render all possible assistance to the projected company.

The market for hematite pig-iron is now on the advance, and as it is the only class of iron employed in the Bessemer system, it is fully evident that a constant demand must exist, and continue to increase, for there can be no doubt, now that the Bessemer process has terminated, a great impetus will be given to this special branch of manufacture; its future requirements, therefore, will be very considerable, and as the production of hematite pig-iron must necessarily be restricted, it will be seen that a good and permanent prospect of success awaits this important section of the iron trade.

Applications for shares will also be received by the solicitor of the company, LAWRENCE HOLDEN, Esq., Lancaster, from whom prospectuses can be obtained.

FORM OF APPLICATION FOR SHARES.

To the directors of the Piel Hematite Iron Company (Limited).

GENTLEMEN.—I request that you will allot me shares in the above company, and on receipt of notice of such allotment, I will pay to the bankers of the company £10 per share as deposit; and I undertake to pay any future calls as they may become due. I further request that you will place my name on the Register of Members for the shares so allotted.

I am, Gentlemen,

Name.....
Residence.....
Occupation.....

The Monte Albo Mining Company

(LIMITED).

Incorporated under the Companies Acts, 1862 and 1867.

CAPITAL £100,000, IN 20,000 SHARES OF £5 EACH.

Of which 12,800 are to be A shares, to bear a preferential dividend of 15 per cent. per annum, and 7200 are to be B shares, which are to take a dividend of 15 per cent. per annum, if such is earned after A shares have received £15 per cent., and any arrears thereof. The remainder of net returns available for dividends over the 15 per cent. on both A and B shares respectively, and the payment thereafter of £1 per ton royalty on ores sold, to be equally divided on all shares.

The 7200 B shares, fully paid-up, being allotted to the vendors in part payment of the purchase-money.

The 12,800 A shares are offered for subscription.

Deposit on application, £1 per share. Payment on allotment, £4 per share.

In the event of no allotment being made, the deposits will be returned in full.

DIRECTORS.

PHILIP EDWARD BLAKEWAY, Esq. (Director of Devon Great Consols Mines Company).

CHARLES CHAMBERS, Esq., 3, Westminster Chambers, Victoria-street, S.W.

GEORGE SHEWARD, Esq. (Chairman of the English and Foreign Credit Company), 17, Leinster-square, W.

Major JELF SHARP (Chairman of the Australian United Gold Mining Company), Junior United Service Club, S.W.

Sir ALFRED FREDERICK ADOLPHUS SLADE, Bart., Maunsel House, Bridgwater—14, Cromwell-place, South

Kensington, S.W.; Army and Navy Club, Pall Mall.

(With power to add to their number.)

BANKERS—Messrs. BARNETTS, HOARES, HANBURY, AND LLOYDS, 60 and 62, Lombard-street, E.C.

SOLICITORS—Messrs. COPE, ROSE, AND PEARSON, 26, Great George-street, Westminster, S.W.

BROKERS—Messrs. P. W. THOMAS, SONS, AND CO., 50, Threadneedle-street, E.C.

CONSULTING ENGINEER—THOMAS J. BEWICK, Esq., Civil and Mining Engineer, M. Inst., C.E., F.G.S.,

27, Great George-street, Westminster, S.W., and Haydon Bridge, Northumberland.

AUDITORS to be appointed by the shareholders at the first general meeting.

SECRETARY (pro tem.)—R. M. CUNNINGHAM, Esq.

OFFICES,—110, CANNON STREET, E.C.

This company is formed for the purpose of acquiring by purchase and for working and further developing the important and highly productive silver-lead mines, known as Guzzarra and Su-Ergiola, situate in the commune of Lula, district of Nuoro, Province of Sassari, Island of Sardinia, held under a concession of His Majesty the King of Italy, dated the 12th January, 1868.

The concession gives the right of working the minerals in perpetuity (free of royalty or any payment except export duty) over an area of 880 acres. The property was purchased in 1862, and the work of exploration commenced six months after, and has since been continued, and the mines are now in full operation. Accommodation for several hundred workmen, together with offices, workshops, stables, and stores, have been successively provided and erected.

Connecting roads between the mines and an excellent road to the Port of Siniacola, distant about 22 miles, have been constructed, and stabling, stores, &c., have been erected for the relays of horses (for the transport of ores from and materials to the mines) on the road and at the Port of Siniacola, at a cost of £8000.

Up to June, 1869, a very large sum in addition had been expended in developing and working the mines; besides the original cost of the property and concession.

These mines, hitherto explored and developed solely through private enterprise, are in thorough working order. Their richness is fully proved by the results and the report of Thomas J. Bewick, Esq., Civil and Mining Engineer, M. Inst., C.E., F.G.S., and they promise, under fair management to rival, if not to surpass, the celebrated lead mines of Monte Vecchio, and those of Monte Ponì, also in Sardinia, which are well known to have returned for many years very large profits to their shareholders, and which continue in the same prosperous condition without any appearance of exhaustion.

The following are the returns of the mines from the commencement, as extracted from the vendors' books:—

Year ending 30th June, 1864	Tons	85
ditto ditto 1865	217	
ditto ditto 1866	1176	
ditto ditto 1867	2141	
ditto ditto 1868	3420	
ditto ditto 1869	3444	

Mr. Bewick says—"In the future of these mines there are good grounds to be hopeful. The known richness of the veins at Su-Ergiola and Guzzarra, the prospects of further discoveries in following the proved veins to the east and west of the existing workings, and by the deep adit and the development of the lodes lying to the north, induce me with confidence to fix the average produce at 6000 tons per annum for many years to come. It is possible, nay probable, that this yield may be greatly exceeded, but in a matter of this character I prefer to rather understate than overstate what is, as in all mining matters, a somewhat speculative estimate."

He also states, under date 26th March, 1870—"The working and further development of these mines are, in my opinion, likely to prove one of the soundest and most permanent undertakings of the kind; and being in full working order, and yielding large quantities of lead ore at a high rate of profit, without the necessity of any great outlay in exploration or machinery, they are in a dividend paying condition at the outset."

The present returns, which are in excess of the quantity (6000 tons) stated above, give the property a character for solidity and soundness seldom found in mining operations.

A provisional contract has been concluded with two of the directors on behalf of the company for the purchase of the concession and property, comprising as follows:—

1st. For the purchase of all the rights and privileges conferred on the vendors, by Royal concession, of the said mines, given in their favour in Florence, the 12th January, 1863, by His Majesty Victor Emmanuel, King of Italy, together with any extension of the said concession which may be granted to them.

2nd. All the freehold grounds and lands belonging to the vendors, and the buildings thereon.

3rd. All the machinery, materials, tools, and implements used in working the said mines, and the stock of horses and oxen.

4th. All the rights of the vendors to the roads by them established, and to the advantages and profits, whatever they are, and to them conferred by the commune of Lula, and by the Italian authorities, at the two ports of Orzoi and Siniacola, and elsewhere, without exception and without reserve.

The terms of purchase are—the sum of £36,000, to be paid as follows:—

In cash £20,000

In 7200 B shares paid up 16,000

Total £36,000

Besides a royalty of £1 per ton on 80,000 tons, but payable only after the distribution of an annual dividend of £15 per cent. on both A and B shares. In the event of the profits in any year not paying £15 per cent. on the A shares, the deficiency is to be made up out of the profits of future years, before the B shares are entitled to dividend.

The vendors reserve the right to purchase for cash 2000 tons of ore per annum until 1876, at 3s. under the official quoted price, to cover existing and delivery engagements.

Taking the average produce of the mines at 6000 tons, the ores (as shown by Mr. Bewick's report) being now won at a cost of £5 18s. 6d., f.o.b. at Marsellies, where they now realise £11 5s.; thus, after allowing for every contingency, leaving a net profit of (say) £5 per ton, the following result is obtained:—

6000 tons at £5 per ton £30,000 0 0

1st.—15 per cent. preference on £30,000 A shares. £9000 0 0

2d.—15 per cent. on £36,000 B shares 6480 0 0

Total £45,480 0 0

3d.—£1 royalty on 6000 tons 6,000 0 0

Leaving £9,000 0 0

equal to 9 per cent. on £100,000, making, with the previous 15 per cent. preferential dividend, a total of 24 per cent. per annum.

It is believed that these results may be greatly exceeded as the present workings are extended. It is also to be observed that the royalty of £1 per ton being limited to the first 30,000 tons of ore sold, a further important profit will accrue in the course of a few years.

The report of Mr. Bewick, who visited the mines in December last, and examined the property most minutely, has been carefully prepared, and his connection, as engineer, &c., with the celebrated W. B. Lead Mines, in the counties of Northumberland and Durham, for a period of 20 years, and his previous and subsequent experience in mining matters are a guarantee of the soundness of his opinion.

No other than the ordinary expenses in the formation of the company will be paid. Application for shares, with the payment of £1 per share on the number applied for, should be left at the company's bankers. If no allotment is made, the deposits will be returned in full, and if an allotment is made, will be applied on account of the amount payable on shares allotted.

The following agreements have been entered into, which, together with the original concession, and copies of the Memorandum and Articles of Association, can be seen at the offices of the company's solicitors.

1869, December 28th. Agreement between Joseph Francis Pascal Signe on behalf of himself and others of the one part, and Eugene Hay of the other part. 1870, March 26th. Deed of agreement between the said Eugene Hay of the first part, the said Joseph Francis Pascal Signe of the second part, and Charles Chambers and George Sheward of the third part.

Prospectuses, with forms of application for shares and printed copies of report, with plans and sections, can be obtained at the brokers and at the offices of the company.

Notices to Correspondents.

♦♦ Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be filed on receipt: it then forms an accumulating useful work of reference.

DRESSING ORES.—Can any of your correspondents inform me, through the Journal, whether the proposition for separating ores from the refuse by the use of air instead of water has ever been carried into effect, and, if so, where a pneumatic ore-dresser can be seen in England in operation?—R. S.

SLATE REFUSE.—The disposal of the enormous quantity of refuse made at slate quarries frequently costs an amount which if distributed amongst the shareholders would be equal to a fair dividend upon the outlay made upon the quarry. Not only does the refuse yield no return, but the money has often to be paid for tip-room in addition. So much has been done of late years in utilising waste products that I am surprised no effort has been made to utilise refuse slate. As it is easily reduced to very fine powder, I should think it might be readily manipulated. I believe that if it were mixed with lime, and reduced to an almost impalpable powder, it would prove a very good material for footpaths, &c., where solidity and strength combined are desirable. This powder made into mortar or concrete with good coarse gravel would make a most durable compound. The only question is the cost of grinding the lime and slate dust and burning it to render it fit for use, but I should think these are not unsurmountable difficulties.—K. G.

BARYTES.—In last week's Journal "B. M. C." requires information relative to the market value, &c., of Barytes. As a mining engineer, and connected with the barytes trade, I may reply that the quality of barytes varies greatly, some being worthless—its price depends greatly on its position also. If the barytes be of good quality, and can be raised for 2s. 6d. per ton, "B. M. C." may fairly expect good remuneration. The best plan would be to take the opinion of some competent person as to the quantity and quality of his article. Details permitting, I could take large quantities off "B. M. C.'s" hands.—A. R. S. M.

SHARE DEALING.—We never interfere in the sale or purchase of shares; neither do we recommend any particular mine for investment or speculation, or broker through whom business should be transacted. The addresses of most of the latter appear in our advertising columns.

THE MINING JOURNAL, Railway and Commercial Gazette.

LONDON, APRIL 9, 1870.

BRITISH MINING A PROFITABLE INVESTMENT.

The present position of British Mining interests generally must be gratifying and reassuring to all parties engaged therein; this satisfactory state is, however, no more than we had all along predicted as a natural sequence to the undue depression under which they had laboured during the last few years. All kinds of speculative properties have suffered the same or kindred causes. Many have not yet, and probably never again will, recover the position they once held in public estimation. Under these adverse, trying circumstances mining has been proved to be not only the most remunerative but the most secure channel for investment that can be adopted.

Taking these views of the subject, it may be well to consider the causes which led to so serious a reverse as that to which we have alluded, and to study the reasons why a long course of prosperity for the future is probable. Foreign competition has been very generally considered one of the primary sources. The great panic in the money market, however, was undoubtedly the principal element of the disastrous effects. It must be admitted that these results partially originated from over anxiety for speculation, causing many adventures to be brought forward that never should have been. Again, many schemes were introduced (in too many instances by not over-scrupulous originators) which could not by possibility be rendered remunerative, either in the time or with the amount of capital mentioned in their several prospectuses; these, however, are conditions to which all classes of speculative properties are necessarily more or less liable, and one by no means peculiar to mining companies. If we look at the prodigious numbers of schemes of all sorts that have been registered since the Limited Liability Act has been in use we shall find the fact that the interests we specially advocate have stood the tests of time and circumstances better than any others, and that less capital has been sunk therein than in any series of joint-stock companies that have been formed. Mining has yielded many grand prizes as rewards of perseverance, whilst the majority of those not yet arrived at maturity, or become remunerative, have attained positions that will eventually be successful.

We could quote instances in which almost fabulous sums have been realised by fortunate and judicious adventurers, such, indeed, as no other class of speculation can attempt or hope to equal; no doubt can be entertained but others quite as rich are in store for the future. To use a mining maxim, "There are as good fish in the sea as have been taken out." The excessively low prices of metals and of metallic ores, consequent on the stagnation of trade during the panic, have been, as we predicted, only temporary, merely the vicissitudes to which all workable properties are periodically liable; reaction under such circumstances was as sure to set in as that tomorrow's sun will appear. It has been proved now by dearly bought experience that foreign ores cannot be imported at prices below those at which British ores can be wrought advantageously in well selected and carefully conducted mines. Present prices of metals and minerals are at fair quotations, at which we may expect and hope to see no undue variation; speculation may, however, cause partial advances, which will again ensure reaction.

Another cause of probable prosperity is that the Mining Market has been well cleared of bubble concerns, the science of mining better understood, prejudice shaken, new districts rich in mineral ore being opened up, new companies formed to re-work (under good advantages) some promising sets which were obliged to be abandoned from the untoward circumstances before mentioned; caution has been engendered by the severe lessons of the past—that necessary element to success, although dearly purchased, cannot be said to have been so in vain; it was, perhaps, never more needed than at present, when so many undertakings are being brought forward, and probably there never was a time when so many really genuine affairs were introduced, or there were greater chances of permanent success.

Notwithstanding all these favourable conditions we, as journalists, cannot in our duty close our remarks without reiterating the advice we have often given to our readers—use caution in the selection of the mines and the projectors, and consider whether the would-be-adventurers possess the useful qualifications to undertake the responsibilities of their engagements, irrespectively of any promised result or adverse circumstances. These conditions fulfilled, we dare pronounce British Mining enterprise to be at once the safest and most remunerative investment that can be selected for unemployed capital.

GOVERNMENT INSPECTION OF MINES.

The coalmasters' interest in connection with the Mines Regulation Bill was thoroughly discussed at the Preliminary Meeting of Ironmasters at Birmingham. The amendments suggested by the Mining Association were considered highly desirable, and the opinions were very strong; with regard to the clause throwing responsibility for accident upon the owners and agents, instead of upon the person who is the immediate cause of an accident. Precisely the same view is taken by the mine agents; and the South Staffordshire and East Worcestershire Institute of Mining Engineers have been exerting themselves to ensure practical effect being given to their opinions; they have addressed a letter to the local members, pointing out the difficulties under which they would labour. They do not doubt that the intention of the framers of the clause is to provide a summary remedy, with an adequate punishment, for cases of gross and wanton neglect; but anyone who has followed the working of even the existing enactments in the Staffordshire district must, they think, be satisfied that such a power of imprisonment cannot be entrusted to justices in Petty Sessions without exposing mine owners and agents to risks calculated seriously to fetter mining enterprise, and depreciate mineral property. It is notorious that the stipendiary magistrates of this district (before whom mining prosecutions are usually brought) holds mine owners, even though entrusting the management of their mines to the most competent agents, to be punishable for any neglect of such agents, and in like manner makes the latter liable for their subordinates; so that they consider should the clause,

MONTE ALBO MINING COMPANY (LIMITED).

Notice is hereby given, that the LIST OF APPLICATIONS FOR SHARES in this Company will be CLOSED on WEDNESDAY, the 13th instant, for LONDON, and on THURSDAY, the 14th instant, at Four o'clock, P.M., for the COUNTRY.

110, Cannon-street, London, E.C., 8th April, 1870.

By order, R. M. CUNNINGHAM, Secretary (pro tem.)

framed, pass into a law, there is no mine owner or agent in the district but will run the risk of imprisonment for the carelessness of some inferior.

The colliers are equally energetic; they are circulating a list of the amendments they seek to get adopted amongst the members, and have already secured considerable support. They propose:—

1.—That the Mines Inspection Act be extended to all coal mines, ironstone mines (except hematite), and shale mines, as moved by Lord ELCHO. Reason: The ironstone mines and shale mines, which are not embraced in the proposed Bill, contain gases in some instances explosive—all carbonic acid gas—which is highly prejudicial to human life. The machinery at most of them is of the same character, and ought to be under the same inspection.

2.—LENGTH OF HOURS: In clause 6 of the Bill it is proposed that children may be employed 12 hours, with an interval of not less than 10 hours from each period of employment, from 12 to 16 years of age. We desire that children above 12 and under 14 shall not be employed more than 50 hours in any one week, and not more than 12 hours in any one day, with an interval of 12 hours between each period of employment; that from 14 until 16 they shall not be employed more than 50 hours in any one week, and not more than 12 hours in any one day, and an interval of 12 hours between each period of employment. Amendment to be moved by Lord ELCHO. Reason: The proposition in the Bill might lead to children being employed in mines 125 days more in the year than in factories. The proposition as to giving an hour and a half interval for meals is utterly impracticable—10,000 inspectors could not carry it out.

3.—EDUCATION: The Bill does not provide for education. We desire that all children employed below ground or above ground, connected with mines, between 12 and 16 years of age, shall attend school not less than 10 hours in every week. To be moved by Lord ELCHO.

4.—WAGES: In clause 2, line 35, it is proposed that wages shall be paid in money only. We desire that it shall be inserted that the wages shall be paid weekly, and within eight days of the last day of the week in which such wages have been earned. Amendment to be moved by Sir ROBERT ANSTRUTHER. Reason: Pays in many places are now monthly and fortnightly. The long pay is generally connected with the truck system, which has a most demoralising and debasing influence on the mining population.

5.—WEIGHING THE MINERS' MATERIAL: In clause 12, line 9, it is proposed to use and allow measuring and gauging. We desire that measuring and gauging be struck out in that line, and other lines to the end of the clause, and that the standard weights only be used; these to be under the supervision of the district inspector of weights and measures, as stated in the bill. We desire at the same time that the person employed by the workmen shall have every facility for taking a correct account for those by whom he is employed. The omission and insertion of the words to be moved by Lord ELCHO. Reason: The want of a true system of weighing the quantities of coal and iron has been productive of many of the unfortunate disputes that have taken place in the mining districts; it is at the present time a source of continual irritation.

6.—GREATER VIGILANCE IN THE MANAGEMENT OF MINES: It is desired that more vigilance be shown in the management of mines. It is proposed at the end of rule 19, clause 18, page 8, and line 34, to insert as rule 20:—That a daily inspection be made of the mine; that a record of the same be kept. An abstract of the record to be sent to the inspector of mines every four weeks. To be moved by Lord ELCHO. Reason: A register so kept would be in itself a reference in case of any accident taking place, which would at once indicate whether every precaution had been taken for human safety.

7.—TRAINED MANAGERS: We desire agents or managers should be trained, and certified that they are competent to take the responsibility upon them of agents or managers of mines. To be moved by H. B. SHERIDAN. Reason: The universal testimony of the inspectors of mines point to this as a necessity. The admission of Mr. BRUCE, in introducing the Bill, and the late Duxfield Explosion.

8.—PROWOOD: We desire that wherever propwood is required, that the wood shall be cut, and placed close to where the workmen are employed. To be moved by H. B. SHERIDAN. Reason: Workmen having to bring forward their own wood leads to a great destruction of human life.

9.—REGISTRATION OF AGENTS OR MANAGERS OF MINES: The want of knowing who is the authorised agent or manager of a mine or mines is often a source of great inconvenience to the workmen, and to others. We desire that after the passing of the Act, the names of the authorised agent or manager of every mine or colliery shall be deposited in the hands of the inspector. And the appointment of any new manager or agent to be recorded in the same way. To be moved by W. T. CHARLEY.

10.—INCREASED INSPECTION: In clause 38 in Bill, page 17, line 12, we desire that it shall be inserted—That the inspector shall make a visit to every mine in his district at least once in every six months. To be moved by Mr. J. T. HARRIS. Reason: The universal testimony of coroners' juries and the public generally, that the present system of inspection is inadequate to protect underground workers.

EJECTOR CONDENSORS—ALLEGED INFRINGEMENT OF PATENT.

In the Chief Scotch Law Court, before the Lord President and a jury, an action was raised which occupied their attention from March 23 to 30. The pursuers were NELSON and Others against BARCLAY, whom they sought to restrain from using their alleged "improvements in the lateral action or induction of fluids, and in the apparatus or mechanism employed therefor," by making, vending, or using the improvements in the lateral action or induction of fluids, and in the apparatus or mechanism employed therefor, described in a specification filed on January 14, 1868, and in particular from making, vending, or using any apparatus or mechanism for the condensation and ejection of steam constructed in the manner described in the specification. The issues sent to the jury required them to determine (in the light of the evidence adduced) whether, during the currency of the said letters patent, at Addiewell Oil Works, near West Calder, in the county of Linlithgow, at Fauldhouse Pit, in the county of Linlithgow, and at the defender's works, Caledonia Foundry, Kilmarnock, in the county of Ayr, or at one or more of said places, wrongfully, and in contravention of said letters patent, use the invention described in said letters patent and specification. The trial, which lasted over seven days, resulted in the following verdict:—

The jury find that under the issue for the pursuers the letters patent have not been infringed at Addiewell Oil Works, at Fauldhouse Pit, or at the Engine Foundry at Kilmarnock; but that the patent has been infringed by the defender at the large engine in the fitting-shop at the defender's works at Kilmarnock; find, that the improvement in the Giffard injector is a new invention as claimed by the pursuer in the specification, and find for the pursuers under the three alternative issues for the defenders.

In looking carefully into this decision, while it is satisfactory to note that the patentees have decided in their favour all that their patent covers, it is to be regretted that the heads of the Patent Office are not sufficiently informed on all subjects of patents so as to prevent their authorisation being given to contrivances already even partially in use. Of the three instances of alleged infringement of patent the jury found for the respondent on two of them, and for the complainers on only one. This makes it plain that the complainers must have patented more than they were entitled to do, or misconstrued the import of their privilege. The respondent averred that the alleged invention did not consist of improvements in the lateral action or induction of fluids, but of improvements in steam-engines, and improvements in injectors; and that the complainers were not the first and true inventors of the alleged invention. Inventions or contrivances similar to or substantially the same were described and disclosed in Letters Patent granted to various persons which the respondent named, and were publicly used in Great Britain prior to the date of the said letters patent. The jury adopted this view of the case, so far as is indicated in their verdict, given above, and relieved the respondent of the consequences; but this was done at an expense which would have been wholly avoided if the Patent Office had been able to eliminate from the specification those portions of the contrivance which had been the subject of previous patents, and which were alleged by the respondent to have been in "public use" previous to the date of the letters patent, which gave rise to this action. Mechanical ingenuity is entitled to be as efficiently protected as ingenuity in letters or in art; but care should in every instance be taken, both by the Patent Office and the patentees, that in securing or authorising patents they are neither trenching on the inventions of others, nor infringing on rights already the property of the public.

IMPORTANT DISCOVERY OF MINERAL LODES NEAR BRIDGWATER.—A few months ago the outcrops of three lodes were discovered crossing an old lane near the secluded village of Spaxton. The lodes revealed, nearly up to the roots of the grass, extraordinary evidences of richness for lead and copper, and as some Cornish miners, working a few miles off at the Brendon Hill Mines, became acquainted with the discovery, sharp competition for the sett quickly followed. It appears that some private parties residing in Bristol succeeded in obtaining it on very favourable terms—from Mr. J. WINTER, J.P., the landowner—and immediately commenced exploring. Another north and south masterlead lode parting the entire strata (which is highly mineralised hill) was discovered. This dips towards the other lodes, and large deposits of ore are expected at the junctions, which will not be very deep. It is a rare thing for lodes to yield paying work very near surface, but already considerable quantities of mundic have been worked, and several tons of it have been sold for sulphur ore, and sent off by rail

from Bridgwater to manure works in Wiltshire, for making oil of vitriol. It contains some copper, although as yet the operations are quite shallow, and the quantity of lead in the lode increases every foot the miners sink deeper, so that ultimately it is intended to sell the ore for lead smelting at a much higher price. A good amount of silver is associated with the ore. The sett being extensive, it is capable of yielding permanent supplies of mundic, to be worked from the upper lodes, and as it can be delivered at Bridgwater for nearly half the price usually paid by vitriol makers it is not improbable that some manure merchants may erect burners and chambers for making vitriol in that neighbourhood. The sett is on a steep declivity, and will be very economically worked, as it commands deep free drainage from the hill side. It is said that the nature of the strata is very congenial to silver-lead and copper, and exactly corresponds to that which has been proved to give rise to the most profitable mines in Cornwall. There are some rumours that as the sett admits of extensive working, in which capital may be advantageously employed, a public company may be some day formed to multiply the profits; and, if so, it is expected from enquiries for shares which have accompanied the explorations that most of them will be taken up in the district. We wish the mine complete success, as its prosperity will greatly improve trade all around the neighbourhood.

THE DRESSING OF LEAD ORES.

BY MR. T. SOPWITH, JUN., M.I.N.S.T. C.E.

This communication* was limited to a description of some works the author had had occasion recently to establish in Spain, for the Dressing of Lead Ores, as a general account of the present state of such operations in England could not be satisfactorily given in a single paper. Moreover, as regarded this branch of mechanical engineering, Germany was in advance of England. By dressing was to be understood the art of obtaining from the raw material extracted from the mine, called bouse or mine stuff, the pure ore it contained, to the rejection of the impurities with which it was associated. Bouse might be said to yield, in an ordinary way, from 5 per cent. to 25 per cent. of galena, which when pure had a specific gravity of 7.75, and produced 86 per cent. of metallic lead. The lead ores of commerce were usually dressed to a tenour of from 74 per cent. to 78 per cent., though argentiferous ores were frequently delivered with a lower percentage. All galena was mixed with silver; but the term argentiferous was only applied to that in which there was upwards of 12 ozs. of silver per ton. In dressing, the principle applied was that of separating the lead ores by means of their readier gravitation. This operation was easy or difficult, according as the accompanying impurities were of greater or less specific gravity.

At the works referred to about 350 tons of lead ore were prepared per month. There were two dressing-floors, the higher and the lower. On the former manual labour was principally employed. On the lower floor the stuff was treated which required to be passed through the crushing-mill; and it was more particularly this machinery and method that it was the purpose of this paper to describe. On the higher floors from 200 tons to 220 tons per month were prepared, or two-thirds of the entire quantity. Two systems of paying the miners were adopted in mineral mines; one, by "tribute" or "bingle," where the men were paid in proportion to the amount of clean ore the mine stuff excavated by them produced; the other, "tutwork" or "fathomtale," where they were paid by measurement. The adoption of the former system introduced complication, and more expense in the dressing operations than the latter.

The author, in describing the various machines, and the quantities of work they could deal with, fixed as a standard the richness of mine stuff treated at about 12 per cent. (by weight), equal to work which would be known in the North of England as producing 2½ bings per shift.

The washing operations commenced by turning a stream of water into the "teams" containing the "bouse," which was raked out by a man on to a grate, and there hand-picked. The author used two grates, the higher one with spaces of 1 in., and the lower one of ½ in., in preference to one grate with spaces ¾ in. wide, as usually employed. The stuff passed through the second grate into a stirring trunk, where a partial separation of the coarser particles from sludge and slime was effected. The coarser particles were of a size convenient for hotching, and the common hotching tub could treat from 8 tons to 15 tons of stuff per day. Between the waste, which was wheeled away, and the pure ore there was an intermediate layer of what was called "chatt," consisting of particles mixed with ore which could not be separated without further sub-division. This was effected by means of a crushing-mill. In England from 25 tons to 30 tons was a fair day's work to pass over one grate. The author found, by the use of two grates, that 40 tons could be passed, without any increase of labour, at a cost of about 2s. 6d. per ton of clean ore produced.

The ore which passed through the coarse wire bottom of the hotching sieve accumulated at the bottom of the tub, and was called "smiddum." This was rendered fit for market by further preparation in the plain buddle. The sludge deposited in the trunks attached to each grate was prepared in a round buddle. A separation having first been made of hard lumps, small stones, or chips of wood, &c., the sludge was delivered at the centre of the buddle, accompanied with water. The bottom being inclined outwards about 1 in 10, the particles were carried by the water in that direction, the heaviest and richest being deposited nearest the centre. The buddle described was larger in diameter, and treated nearly four times more stuff than that usually employed. The water, on leaving the sludge trunk, carried with it a certain amount of slime, which was deposited in pits, and was subsequently treated in a machine called a Brunton's cloth, the action of which was described, as also of the dolly tub, by which the slimes, after being concentrated in the Brunton's machine to about 45 per cent., were further enriched to about 70 per cent., and so delivered for sale. The crushing-mill in common use in England was described, and the inconvenience attached to it, as compared with the simpler form used in Germany, was pointed out. In the apparatus that had been referred to it was probable that about 80 per cent. of the lead ore produced in England was prepared.

On the lower, or crushing-mill floors, which the author had erected, some attempt had been made to secure continuity of action by the use of self-acting machinery wherever it was possible; though, from the circumstance of Spanish labourers being employed, who were totally unaccustomed to the use of machinery, it was necessary that the machines should be of the simplest kind. The stuff which required crushing was conveyed in wagons to the lower floors, being first broken to a size which would pass through a 5-in. ring. This was effected by manual labour, in preference to a stone-breaking machine, as the former allowed of a separation of a small quantity of pure ore, and of a large quantity of waste, which would afford unnecessary work for the crushing-mill. The stuff, after being emptied from the wagons into the hopper of the crushing-mill, was passed through the rollers, and, when crushed, was elevated by a Jacob's ladder, and delivered into a classifying trommel, composed of two shells, an outer one of perforated iron plate, with holes 1½ millimetre in diameter, and an inner one with holes 10 millimetres in diameter. The crushed material was delivered into the inside of the trommel at one end, and passed onwards, the trommel being inclined. All the sludge and slime were got rid of through the outer shell, the inner shell retaining and delivering apart any particles over 10 millimetres in diameter. These were returned to the crushing-mill, to be again passed through the rollers, and the particles, ranging in size between 1½ millimetre and 10 millimetres, were delivered at the further end of the trommel, and passed on to a second, or sizing trommel, composed of one shell only, and were then sub-divided into four sizes—2½, 5, 7½, and 10 millimetres, each size being treated in a separate hotching tub.

For the operation of hotching, the convenience of having all the particles treated of one, or nearly of one, size was obvious, and in some cases of refractory ores it was a necessity. The hotching machines employed are entirely self-acting, and continuous in action, a fast and a loose pulley being attached to each machine. Contrary to the form adopted in England, the sieve was stationary, the water being put in motion by means of a loosely fitting piston. The stuff was delivered into a small hopper, and travelled the length of the sieve, a distance of 28 inches, by which time a perfect separation is

* Read at the Institution of Civil Engineers, April 5.

† A bing was 9 cwts. A shift was eight wagons, carrying about 1 ton each.

effected. It had been found advantageous to increase the length of the stroke and the number of strokes per minute for the larger sizes. By an ingenious movement a quick down stroke and a slow return stroke had been given to the piston. The crushing-mill was more compact than the form used in England, the rollers being kept in contact by the compression of India-rubber buffers in place of a long lever, with a heavy weight attached. The sludge, which passes through the holes of 1½ millimetre in diameter in the first, or classifying trommel, was delivered into a separator—an iron cylinder about 2½ ft. high—where it met a stream of water of sufficient strength to carry the smallest and lightest particles upwards, and deliver them into a launder, whence they were conveyed by the water to the sludge trunks and slime pits, and were subsequently treated in round buddles and in Brunton's cloth. The coarser particles were prepared by manual labour in a common trunk or tie.

The amount of work crushed and prepared on the lower floors was about 55 tons per day of ten hours. The actual cost in Spain was 21s. 2d., but the equivalent of labour would be performed in English mining districts for 13s., the latter sum being at the rate of 2.83d. per ton of raw material treated, or 2s. per ton of clean ore produced. If, however, self-feeding apparatus was introduced to supply the hotching machines, which could easily be done, the latter cost might be reduced to 207d. and 1s. 5½d. respectively. The cost of preparing similar work in England, with machine crusher and machine hotchers, was, the author believed, about 2s. 6d. per ton of clean ore. The whole of this machinery was driven by a 10-horse power portable engine, supplied by Messrs. Ransomes, Sims, and Head. The cost of erection of the crushing-mill floors complete, including the engine, was about 1500l. The same arrangement in England would have cost about 1200l. Most of the machinery was supplied by Messrs. Sievers and Co., of Kalk, near Cologne. No separate crushing mill for the preparation of "chatts" had been erected, as when the "chatts" had been allowed to accumulate the present machinery could be adapted for their treatment in an hour or two, advantage being taken of a time when new rollers had been put in.

The author observed that whereas in England the machinery employed in dressing operations was for the most part made at the mine with the ordinary staff, in Germany there were manufactories giving employment to 400 hands, dedicated almost exclusively to the construction of dressing machinery; and it was not surprising to find in the machines issued from them better proportions, greater elegance, and more efficiency and durability than those used in the mines of this country. The machinery described in this paper had been in use for two years, and, having given good results in Spain, no difficulty need be feared in its application elsewhere.

REPORT FROM THE NORTH OF ENGLAND.

Middlesbrough, April 7.—There was a usual attendance on 'Change here on Tuesday, and a rather buoyant market. Pig-iron was in quick demand, but stocks throughout the district are comparatively low, and iron for immediate delivery is not easily obtainable. Foreign requirements are heavy, and a large quantity of iron has recently been sent to Belgium, Germany, and France. Home demand is also large, and makers are being much pressed for deliveries. Prices are naturally firm, and have an upward tendency, 53s. 6d. No. 1, 50s. to 50s. 3d. No. 3, and 49s. to 49s. 3d. No. 4, net cash, on trucks and f.o.b., were yesterday's quotations. The make of 104 furnaces now in blast is well kept up; but, notwithstanding the immense production, stocks are expected to show a reduction for March. The ironmasters' return for the month has not been issued yet, and we are, therefore, unable to give the figures. Warrants are quoted at 49s. 6d. to 50s. net cash. The stock in warrant store is further reduced this week to 24,144 tons, being 540 tons less than it was on March 29. For rails specifications are reported to be plentiful, American and Russian demand being very considerable, and fresh orders are said to have been booked by Cleveland manufacturers within the past few days, and further orders are being negotiated for delivery during this navigation. The large stock of rails now lying at the different rail makers' yards will, in the course of a little while, be considerably diminished, as by the middle or end of this month the Russian season will have commenced. Makers of railway iron are in full work, and will, no doubt, continue so for some months to come. Iron shipbuilders are also busy. A fine new screw, of 1200 tons, was launched by Messrs. Pease and Co., at Stockton, on Monday, and the other yards on the Tees are in full employment. Foundry business is looking up, and orders have recently been taken for new work by firms in this neighbourhood. There is talk of some new firms commencing in the Cleveland district for both pig and finished iron manufacture.

A meeting of the Board of Arbitration was held in the Exchange Buildings, Darlington, on Monday, when amongst other questions the claim made by Bolekow, Vaughan, and Co.'s Wilton puddlers for an advance of 1s. per ton, in consequence of the alleged uncommon mixture of iron used at these works, was considered. The decision came to was that an advance in wages of 6d. per ton be granted. The Coal and Coke Trades are in a satisfactory position. The present weather is very favourable for shipping, and steam coal pits are making good time. The bindings are about all settled, and, on the whole, differences have generally been settled without much difficulty. The coke trade is brisk, and we hear the Messrs. Pease are thinking of erecting more ovens at their Pease's West Colliery.

REPORT FROM SCOTLAND.

April 6.—We have had another lively week in pig-iron, with a large business, advancing prices, and heavy shipments. We stated in the Journal of March 26, that if holders of Scotch pigs were successful in financing for their warrants prices might be run up a few shillings a ton without much warning, and buyers are already drawn into the vortex of an ascending market. For the week ending yesterday, the shipments reached 19,080 tons, being the third largest weekly shipment recorded in the history of the trade, the two others being for the weeks ending—

March 22, 1870 20,005 tons.

April 19, 1864 19,722 „

Heavy as these shipments undoubtedly are, with melters also taking from our production, the returns show that on March 31 we had the enormous total of 353,379 tons of pig-iron in store, the greater portion of which was held by banks, and, perhaps, with a margin they could hardly hold a more vendible commodity. Of the above, there are warrants in circulation for 333,800 tons, leaving 20,000 tons yet to be rendered into warrants. During the week we have had discharged a few tons of Spanish iron and heavy lots of copper ore at our quays. The sulphur in the copper ore is first utilised by Tennant and Co., at their St. Rolox Chemical Works, the copper is then extracted, and the residuum is used in a powdered state for fettling; or it is crushed, when wet, into brick-like moulds, to render it more solid, previous to being used in the blast-furnace. Last week closed with a strong market, and a large business doing, at 55s. 6d. cash, and 55s. 9d. a month. Monday opened better, and closed 56s. prompt, and 56s. 3d. a month. Yesterday prices still further advanced, and closed strong at 56s. 4½d. cash, and 56s. 8d. thirty days. This is an advance of 2s. a ton within the short period since we hinted at the likelihood of an advance, and those buyers who took our advice, and continue to hold, will all but certainly realise a handsome return. To-day there was rather more ease in the market, and only about 8000 tons were done, at 56s. 6½d. to 56s. 2d. a month, and 56s. 3d. to 55s. 10½d. cash, closing sellers a shade higher. Coltness, 64s. 6d.; Gartsherrie, 64s.; Langloan, 58s.; Eglington, 56s. 6d.—all No. 1 brand. No. 1, g.m.b., 56s.; No. 3, 54s. 6d. Not much business will be done till Tuesday next, on account of the half-yearly religious services at this season. Sinking operations are being carried forward at Armadale, where Messrs. Wilson have leased the ironstone, and are preparing to work it. Manufactured iron is without any notable change, the hands of makers being full of orders. Since last week an order for 20,000 feet of 2½-in. lap-welded tubing has been offered for Canada, but we have not heard of its being placed.

The price of Coals is again firmer, and a full average shipping business is being done, the quantity sent seaward being for the week just ended 39,010 tons, against 38,765 tons in the corresponding week last year. With the return of fine weather there is less demand for domestic coal, but splint is in good demand, and increasing. There

A REAL SAFETY-LAMP.—For several years past various inventions have been patented, with a view to prevent the ordinary safety-lamp (so necessary for working with in mines) from being tampered with. Locks of almost every conceivable description have been brought out, but in nearly all instances they have not been secure from the evil genius of the reckless collier, who, either to obtain a little more light or to get at the flame for the purpose of lighting his pipe, will tamper with them. We have, however, just been favoured with a view of a lamp which appears to combine all the essentials so long desired, and by which any tampering with is shown in a very peculiar manner. The lamp is the invention of Mr. E. Booth, mining engineer, and managing partner of the Silkstone Fall Colliery Company, near Barnsley, who is now having it patented. In the invention there is no lock whatever, or even fastener, the bottom being simply screwed and unscrewed by turning it at the bottom with the hand. After the wick of the lamp is lighted it is turned round, and then it is ready for work. Should an endeavour be made to get at the flame, which could only be attempted by unscrewing the bottom, then the moment that the screw is turned round the light gradually goes out, and before the two parts can be separated the light is entirely extinguished. It is needless to say that on the men knowing that any endeavour on their

temper with the light would cause it to go out, and at once lead to detection, and would be few, or none, who would run the risk of doing so. The invention, we understand, is characterised by great simplicity, which in itself is a recommendation. On a future occasion we hope to again draw attention to the subject, and describe the process.

STEAM COAL FOR THE NAVY.—Sir J. HAY asked the First Lord the Admiralty whether any reports had been received from Her Majesty's ship *Megara* on the subject of the coal supplied to her at Portsmouth last autumn; and, if so, whether he would lay them upon the table of the House?—Mr. CHILDESS said that a report had been received by the Admiralty that "some Welsh coal in Her Majesty's ship *Megara* became heated on Dec. 30, when the ship was near the coast, the North Country coal in the same ship not having become heated. The Commodore enquired into the circumstances, and stated that there had been no danger, but that the use of the particular coal could be considered. We have ordered further enquiry. I do not propose to lay this particular report on the table by itself; but I do propose to lay on the table returns from the fleet on the subject of coal, showing the results of our experience as to Welsh and North Country coal recently purchased, and this report will be included."

COAL IN SPAIN.—At the Alamillos Company meeting, on Thursday, was stated that there was every prospect of a speedy reduction in the cost of Spanish coal, used both for smelting and desilvering, of 3½d. per ton. The completion of the Belmez Railway is now a certainty, and trains will be running from the mines to the Aljondilla in three months. This will at once open up to the company a mass of coal much superior to what they are obtaining from the Balta, whilst the competition, it is expected, will reduce the heavy price of 17s. per ton, now charged for that coal at the pit's mouth.

COAL FIELDS IN LABUAN.—Mr. Pope Hennessy, the Governor of Labuan, in a speech to the Legislative Council, on closing the session of 1869, has given a striking account of the immense benefits these islands promise to yield, not to England only, but to many foreign nations. Labuan is less than 50 square miles in area, and yet it is estimated by competent authorities to contain 400,000 tons of workable coal of good quality. The most approved system of mining is adopted. The native workmen, though employed at a depth of 240 ft. from the surface, enjoy good health, and they are also earning high wages. The Queen's ships on the China station, and the Admiralty ships at Singapore and Hong Kong are being now supplied from these mines, and contracts have been made to furnish the Manila steamers, the French Government of Saigon, and the Dutch mail steamers from them also. Moreover, the opening of the Suez Canal has stimulated the demand for this coal. Labuan is becoming of great imperial value as a naval station. The convicts make the bricks used at the colliery, and put the coal on board the steamers.

COAL IN INDIA.—His Excellency the Viceroy of India, Lord Mayo, has recently visited the coal discoveries in the Chanda district. The coal field is now found to consist of one large seam, 30 ft. in thickness, the outcrop of which has been proved by bore-holes for a distance upwards of 10 miles. Other bore-holes are in progress, and it is expected coal will be found underlying the whole stone area of the district—an area of about 1200 square miles. At the Gogose Colliery 4 ft. of good coal was found after sinking through 80 ft. of sandstone and clay beds, and at 12 ft. lower down the large seam, 33 ft. in thickness, was reached. Gogose was gaily decorated in honour of the Viceroy's visit, and after breakfast the ceremony of the opening of the colliery was commenced by Mrs. Fryar, the wife of the engineer, presenting to Lord Mayo, in Major Lucie-Smith's name, a handsome pelisse, made at Chandah from iron found in the proximity of, and smelted with, the Gogose coal, the wood of the handle, and the gold with which the carvings were relieved, being also products of the Chandah district. The Viceroy then went down the pit, in company with Mr. Fryar, and "picked" for himself a block of coal, and afterwards expressed his willingness that the colliery should be called the Mayo Colliery, wishing at the same time that his next visit might be to inaugurate a railway to carry the valuable products of the Chandah district to market.

OXYGEN GAS.—The Municipal Council of Paris has authorised Messrs. Tessié du Moray and Co. to lay down on the Boulevard des Capucines pipes for the oxygen gas which they have succeeded in producing at a low price—30 centimes the cubic metre. It is proposed to renew the experiments for the system of oxyhydrolic gas lighting which were made in January and February, 1868, in the Court of the Tuilleries, at the request and to the satisfaction of the Emperor. According to the report of the inventors and promoters a saving of 10 per cent. would be effected by Parisian consumers. From a description by Prof. Morton of the works at New York where oxygen gas is manufactured on a large scale, we learn that they consist of retort-houses, engine-rooms, store-houses, pumps for compressing gas in cylinders, and a gas-holder of 26,000 cubic feet capacity. The process is carried on as follows:—About 700 lbs. of manganate of soda are placed in the retort, and heated to the requisite degree; superheated steam from a boiler is then admitted for about ten minutes. Two equivalents of the manganate of soda and two of water react upon each other, the water combines with the soda of the manganate to form a hydrate of soda, the manganate is converted into sesquioxide of manganese, containing only half the proportion of oxygen, and the other half of the oxygen passes off in the free state. At the conclusion of this part of the process the steam is shut off, and the superheated air is admitted for about 15 minutes, whereupon the sesquioxide combines with more oxygen from the air, and is re-converted into manganate acid, which again combines with soda. The retorts in each furnace are charged with 700 lbs. of permanganate of soda, and by the consumption of two chaldrons of coke, and with the labour of three men, 25,000 cubic feet of oxygen are made per day. It is now sold at 2½d. per cubic foot, compressed in reservoirs up to a pressure of 250 lbs. to the square inch. The gas is of excellent quality, and very pure.

THE CHANNEL BRIDGE.—Before the Easter holidays a large foot bridge of more than 130 yards (100 metres) span, and constructed precisely on the system, and to the exact scale, of the proposed Channel Bridge, will have been completed by Mr. Boutet, so that whatever doubts may hitherto have existed as to the practicability of the invention must henceforth be dispelled. The two abutments, formed of enormous blocks of granite, are ready for putting in place, and the tress and platform are set up for a length of 80 metres (the ground at disposal at the Depot des Marbres not allowing of the whole length being extended). On Thursday the French Minister of Fine Arts, Mr. Richard, visited the works for the purpose of inspecting the progress of the model, and expressed himself perfectly satisfied, announcing his determination to renew his visit as soon as it shall have been completed. The tress was thoroughly tested, and resisted without the slightest deflection a strain double that of the testing weight required by the rules of the "Ponts et Chaussées." This model will be exactly one-tenth of the span proposed for the Channel Bridge, and being five times the size of the last model it will, if successful, furnish an excellent illustration of the capabilities of Mr. Boutet's system. It may be mentioned that Mr. Page, the engineer of Westminster Bridge, when last week discussing at the Society of Arts the merits of the different projects for crossing the Channel, gave Mr. Boutet's bridge the second place among them, mentioning very strong reasons against all the other projects, except his own, to which he naturally assigned the first place, and stating that Mr. Boutet's project that he thought a permanent bridge could be established, that there is no insuperable difficulty in erecting piers in the deepest part of the Channel, and that the plan of Mr. Boutet for the superstructure was calculated, to a great extent, to produce the necessary span. The span of the great foot bridge, now being completed, is larger by a third than the longest spans of the ordinary foot bridges of Paris, that of the Ponts-Chaumont included, and the testing of it will not only increase the confidence in Mr. Boutet's ability to construct a Channel Bridge, but secure a continuance of orders for the immediate application of the system for bridges and viaducts on the larger scale. As no necessity exists for the construction and placing of piers the usual soundings, and other preparatory submarine works (which in the construction of bridges by other means absorb three-fourths of the expense) can be completely avoided. The favour with which Mr. Boutet's bridges are being received is not, therefore, astonishing, and it is gratifying to recognise that the success predicted for them at the very outset is being so completely realised.

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending April 3 was £6082, or 10d.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the HALLENBEAGLE AND EAST DOWNS MINING COMPANY.—Notice is hereby given, that ALL CREDITORS of the above-named company are required, on or before Monday, the 25th day of April next, TO SEND IN THEIR NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of THEIR SEVERAL CLAIMS on the said company, to the Registrar of the said Court, at Truro.

Dated Registrar's Office, Truro, April 4, 1870.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the TREVENEN AND TREMENHEERE UNITED MINING COMPANY.—Notice is hereby given, that ALL CREDITORS of the above-named company are required, on or before Monday, the 25th day of April next, TO SEND IN THEIR NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of THEIR SEVERAL CLAIMS on the said company, to the Registrar of the said Court, at Truro.

Dated Registrar's Office, Truro, April 4, 1870.

UNRESERVED SALE OF MINE AND MATERIALS.

SNAEFELL MINING COMPANY (LIMITED).

IN LIQUIDATION.

TO BE SOLD, BY AUCTION (by Order of the Liquidators, appointed by the company), on Wednesday, the 27th day of April inst., at Twelve o'clock noon, in the Parlour at St. James's Hall, Douglas, Isle of Man, all and singular the SNAEFELL MINE, situate in the parish of Lonan, in the Isle of Man, together with the LEASE, and all PLANT, IMPLEMENTS, MATERIALS, and PROPERTY of every kind belonging to the said mining company.

The mine is held under lease from the Crown for a term of years, of which eighteen years were unexpired on the 10th October last. The sett consists of 667 acres of land in the parishes of Lonan and Lezayre. Snaefell Mine is in good working order, and the plant, amongst other articles, consists of a WATER WHEEL, 50 ft. diameter, by 3 ft. 6 in. breast, with all requisite gear for pumping and drawing.

There are on the premises—joiners' shop, changing-house, lead-house, crushing-mill, smithy, with tools, &c.; office, with furniture and fixtures; miner's cottage, with furniture. The washing-floors, though small, have all requisite fittings for washing and dressing.

There are small quantities of iron, steel, timber, and other stores on the premises, and a variety of mining tools, implements, and materials.

The shaft is sunk to a depth of 70 fms., with levels at 25, 40, 50, and 60 fms. below the adit.

Both lead and blende ores are being raised from the mine, and the purchaser will be entitled to any ore raised, if not raised previous to the sale.

The whole will be set-up for sale in One Lot, and will be sold without any reserve.

The mine and property can be inspected at any time on application to Capt. HENRY JAMES, the manager, and further particulars obtained from the undersigned.

By order of the Liquidators, WM. BECKWITH, Bank Chambers, Douglas, 1st April, 1870.

CLOUGH COLLIERIES, COUNTY KILKENNY.

TO MINING COMPANIES, CAPITALISTS, AND OTHERS.

THE above VALUABLE ANTHRACITE COAL MINES, known as the CLOUGH COLLIERIES, situate on the north meadow of the county of Kilkenny with the Queen's county, will be LET, ON LEASE, on most advantageous terms. They are within a moderate distance of the railways at Kilkenny, Ballyragget, Carlow, Athy, Maryborough, Abbeyleigh, and other stations, and of the Barrow and Grand Canal Navigations at Carlow and Athy. There is a constant demand for the produce of the mines, which will be largely increased by the proximity of the supply, and eventually the application of 14½ to railway and steam-ship purposes.

The Great Southern and Western Railway have for some time been using large quantities of anthracite coal, delivered at Athy. The royalty extends under more than 2200 statute acres of the townlands of Clough and Chatsworth, or Aughabridge, the property of George Bryan, Esq., M.P.

All the coal seams wrought in the vicinity are contained in the royalty. The Three Feet or Old Kilkenny Seam, the Four Feet or Jarow Seam, and the Two Feet or Jarow Seam, are all of fine quality, and the latter, which have been erected at the Broomark, on the latter seam, can be had at a valuation. The workings are well laid out, are in good order, with railways, &c., and with a trifling outlay that concern can be put to work in a short time. Abundance of fire-clay, of very superior quality, accompanies the Three Feet Seam and Rook Seam, and ironstone is to be found with all these seams. Brick clay abounds, and water power for any purpose is available. So favourable an opportunity for the remunerative application of capital to the development of one of Ireland's great resources is seldom to be met with.

Proposals will be received, and full particulars given, on application to PATRICK FENLON, Esq., Clough Collieries, Castlecomer, County Kilkenny, who will assist in any examination of the mines; WILLIAM LEWIS, Solicitor, 50, Dawson-street, Dublin; or to JAMES BARRON KENNEDY, Solicitor, Mountjoy-square, Dublin.—March 23, 1870.

FOR SALE.

THE ULING COAL MINES, situated in the district of NAGA, in the island of Cebu (Philippine Islands). The distance from the mines to the sea shore is 10 kilometres, the whole of which is a carriage road. The company possesses a royalty of 40 lots, comprising together 9,000,000 of square metres of ground, with several seams of COAL, two of which, of three and four metres in thickness, have been proved through a distance of two kilometres.

The principal workings consist of two drifts, each 550 metres in length, which have already cut through three of the coal seams, and are now (August, 1869) calculated to be within 50 metres distance of the large ones, and at a depth of 150 metres from the surface of the ground.

The Spanish war steamers have made use of this coal, the consumption of which has been estimated to be 100,000 cubic metres.

The company have ample abundance, carts, and every requisite means for conveying the coal as quickly and as economically as possible.

There are in the neighbourhood of the mines large forests, and large lots of unutilized ground, which now produces timber necessary for the use of the mines, and which may afterwards be turned into tobacco or sugar cane plantations, for which purpose it is admirably adapted.

The mines in the Philippine Islands are not subject to any tax, and all machinery required for coal digging, &c., is free of any duty.

The laws allow any foreigner to purchase, keep, and work the mines. The sale will take place in Manila, by public auction, on the 31st May, 1870. For further particulars, apply to ROSAS HERMANOS, or to ANTONIO DE AYALA Manila.

VALUABLE FREEHOLD ESTATE.

FOR SALE, a FREEHOLD PROPERTY, containing about 750 acres of arable, pasture, and woodland, situate in a beautiful part of SOUTH WALES.

There is excellent woodcock shooting, and good covers for other game, also capital fishing in the neighbourhood.

The Estate contains immense quantities of COAL and IRONSTONE, and presents every advantage for the combination of an attractive residential and profitable property, with a high rate of interest on the purchase-money.

For further particulars, apply by letter to W. D. S. COOPER, Esq., Solicitor, 22, Lincoln's Inn-fields, London.

FIFESHIRE.

COAL FIELD TO LET.

TO BE LET, for Nineteen Years, with entry at Lammas next, the COAL FIELD OF CLUNY, in the parishes of KINGLASIE and AUCHTERDEBBAN, and county of FIFE, with the COLLIERIES' HOUSES, all as lately possessed by Messrs. LANDALE and BOYD, Coalmasters, with a trifling alteration in the marshes, and with the exception of some of the houses formerly occupied in connection with the colliery.

The coal field has been partly fitted up with MACHINERY and PLANT, which a tenant will be bound to take at a valuation. The machinery is new, and of an excellent description, and suitable for the field.

The coal in the adjoining lands has been wrought for many years, and proved to be of an excellent quality, and it is expected that the field now to be let will be equally good.

If desired, a FIELD OF LAND can be LET along with the coal field.

For further information and particulars, application may be made either to Messrs. DUNNAN and WILSON, C.S., 16, St. Andrew-square, Edinburgh; Messrs. J. and G. H. GEDDES, M.E., 9, Melville-street, Edinburgh; or to Mr. J. L. GOW, Rath, Kirkcaldy, who will give directions for showing the premises and boundaries, and either of them will receive offers up till 12th April next.

Edinburgh, 24th March, 1870.

TO BE LET, a VALUABLE COAL FIELD, in NOTTINGHAM-SHIRE, containing between TWO THOUSAND and THREE THOUSAND ACRES of the TOP HARD SEAM of COAL.

Apply to Mr. T. W. JEFFCOCK, 18, Bank-street, Sheffield.

TO BE LET, ON LEASE, for a term of years, SEVERAL ACRES of LAND, suitable for MANUFACTURING PURPOSES, advantageously situated on the south bank of the River Tyne, about two miles below Newcastle-on-Tyne, and within a quarter of a mile from the North-Eastern Railway. There is a good quay frontage, with deep water.

Apply to Mr. T. S. BRAMWELL, King-street, Quay-side, Newcastle-on-Tyne.

NORTH WALES.

FOR SALE, BY PRIVATE CONTRACT, part of a most VALUABLE SLATE AND SLAB PROPERTY, held on lease for a term of 40 years, from March, 1863, at 1-16th royalty.

The property advertised is a counterpart of a slate and slab range now in work, the merits of which will bear the fullest investigation.

Both the slate and slab veins are unusually thick, and require, comparatively, but small capital to return large profits.

The property has the advantage of a splendid water power, and a tramway passes through the set to the shipping port—distance about six miles. Full particulars can be had by applying, by letter, to "Box C31," Post Office, Liverpool; or to—

Mr. JOSEPH KELLOW, Quarry Engineer, 2, Park-terrace, Fort Madoc, North Wales.

TO ENGINEERS, &c.

NEW MOTIVE POWER, COMBINED AIR AND STEAM, SAVING ABOVE FIFTY PER CENT. FUEL.

GALLOWAY AND COMPANY WILL GRANT LICENCES TO ENGINEERS TO APPLY MR. G. BELL GALLOWAY'S INVENTION to all DESCRIPTIONS of ENGINES, as contained in his Patent dated January 7th, 1865.

For terms of Licence, address B. FOTHERGILL, Esq., C.E., 15, George-street, Mansion House, London.

MINING SETTS IN DEVON.

TIN, COPPER, AND LEAD, in the Manor of SHEEPSTOR, and LANDS in TAVISTOCK, WHITCHURCH, PETER TAVY, LAMERTON, and LIDFORD. Water power. Terms, 21 years, renewable. Dues, 1-30th for Tin, 1-20th for Copper and Lead, reduced to 1-60th after a moderate outlay, until mines pay cost.

Apply to Mr. CATER, Solicitor, Plymouth.—Feb. 19, 1870.

VALUABLE CORNISH MINING MACHINERY.

MESSRS. J. C. LANYON AND SON have FOR SALE a very superior lot of the above, including—

80, 60, 50, 30, and 24 inch PUMPING ENGINES; 24 inch ROTARY ENGINE, with CAPSTAN; 22 inch ditto, with CAPSTAN and CRUSHER;

Several good BOILERS; A large assortment of FITWORK of all sizes; STRAPPING PLATES, rolled and goggled, all of which are secondhand, in good condition, and will be sold on very reasonable terms.

For particulars, apply to—LANYON AND SON, MERCHANTS, REDRUTH. Dated Redruth, Feb. 23, 1870.

SOUTH EXMOUTH MINE, HENNOCK, DEVON.

FOR SALE, BY PRIVATE CONTRACT, the following, viz.:

40 in. cylinder PUMPING ENGINE. 25 in. cylinder WHIM ENGINE, with CRUSHER attached. 60 fms. 11 and 12 in. PUMPS in shaft. 30 fms. 11 and 12 in. PUMPS at surface.

Timber, and various useful mining materials. Apply to Capt. JOHN CORNISH, Frank Mills Mine, Christow; or to Mr. J. O. HARRIS, Public Accountant, 2, Gandy-street, Exeter.

FOR SALE, BY PRIVATE CONTRACT, at PAR CONSOLS MINE, near Par Station, CORNWALL,

EIGHT STEAM ENGINES,

Including ONE 80 in. (with BOILERS), for pumping, stamping, and drawing purposes; THREE HUNDRED PUMPS, from 6 in. to 20 in.; 4 and door-plates; hammered iron rod plates; rail, scrap, and cast iron; with a large quantity of useful MINING MATERIALS.

For particulars, apply to Capt. PUCKEY, at the counting-house.

PERRAN FOUNDRY, CORNWALL.

ENGINES AND MINING MACHINERY FOR SALE:

ONE 36 in. PUMPING ENGINE, secondhand. ONE 30 in. PUMPING ENGINE, secondhand. ONE 11 in. HORIZONTAL HIGH-PRESSURE ENGINE, new. ONE 8 in. HORIZONTAL HIGH-PRESSURE ENGINE, new.

BOILERS for the above. A large assortment of new and secondhand FITWORK in stock, of all sizes at moderate prices. WILLIAMS' PERRAN FOUNDRY COMPANY. Dated 14th December, 1869.

FOR SALE, THE UNDERMENTIONED ENGINES:

ONE 50 in. cylinder PUMPING ENGINE; with ONE BOILER. ONE 36 in. cylinder ROTARY STEAM ENGINE, 9 ft. stroke, with 10 ton BOILER, wrought-iron fly-wheel shaft, and 12 ton fly wheel, nearly new from the works.

ONE 12 in. cylinder rotary STEAM ENGINE, with ONE 6 ton BOILER. THREE CORNISH BOILERS, from 10 to 12 tons each, in excellent condition. Also, several CORNISH CRUSHERS, of various sizes.

For further information, apply to W. MATHEWS, Engineer, Tavistock, Tavistock, Aug. 17, 1869.

FOR SALE, cheap, several FIRST-CLASS NEW PORTABLE STEAM ENGINES, with all recent improvements, and guaranteed;

9-horse power, 12-horse power, and 25-horse power, ready for delivery. Superior PIT WINDING GEAR supplied at a short notice, suitable for Portable Engines.

FOR SALE, an excellent SECONDHAND PORTABLE STEAM ENGINE, with a NEW MORTAR MILL.

Apply to—BARROWS AND STEWART, ENGINEERS, BANBURY.

THE HOLYFIELD LEAD MINING COMPANY (LIMITED).

THE FIRST GENERAL MEETING of this COMPANY, which has just been registered, was HELD at the Registered Office, No. 60, English-street, Carlisle, on THURSDAY, the 24th February.

Mr. R. PERCY ROBERTS (the Secretary) read the notice convening the meeting.

Mr. HUGH PATTINSON, of Alston, was called to the chair, and in his opening remarks said that it afforded him much pleasure to be able to state that the prospect of the mine had unmistakable evidence of turning out one of the best mines in the Alston district. The present shareholders are quite aware that the "Holyfield" is not a newly-opened mine, but one that from mere surface working had turned out something like 20,000 blings of ore. What, then, may we not expect of such a mine when worked, as we are now doing, in depth? It must also be remembered that the Holyfield is situated in the finest beds of the Alston district, and adjoins the far-famed "Haigburn," the shareholders of which company realised their fortunes, and he believed the Holyfield would ultimately prove as satisfactory. I must inform the shareholders that we have had water to contend with, but this only gives additional weight to prove the value of the workings, for I have never heard of a really first-class mine but had water to contend with. Wallace, in his splendid work on mining, lays this down, I believe, as a law or certain index; or, in other words, where there are large quantities of lead there is also water. We shall, however, easily, I am glad to say, manage to keep the workings free from water, and it is proposed by the manager, Mr. Peart, to put a pump on the mine, which will entail but a trifling cost. As to the unsold shares, the number is about 3000, 2000 of which we can offer to the public, and retain 1000 for shareholders who have expressed a desire to increase their holding.

After which the directors and auditors were appointed.

Mr. JOHN PEART, the captain of the mine, stated that his last visit to the mine took place about ten days ago, and that the appearance of the mine was very promising indeed. The lead continued to bear through the several strata already cut through in sinking the pump, lead being, in fact, discovered in the quarry hole, which he had not expected, specimens of which were shown at the meeting. He considered the prospects of the mine most cheering, and entertained the strongest expectation that it would turn out to be a most profitable speculation.

As Mr. Peart is a gentleman of great practical experience in mining matters, and has an intimate knowledge of the Alston district, his opinion is entitled to great weight.

All the shares already subscribed for were duly allotted.

The usual vote of thanks was accorded to the Chairman; and the meeting, which was a most satisfactory one to the shareholders present, then terminated.

APPLICATION FOR SHARES to be made to Mr. R. PERCY ROBERTS, Secretary, 60, English-street, Carlisle.

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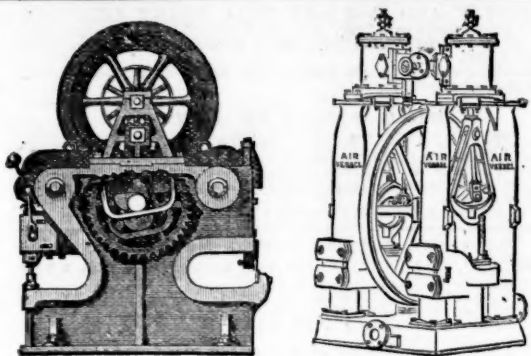
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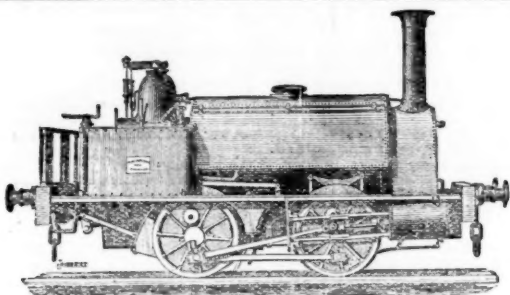
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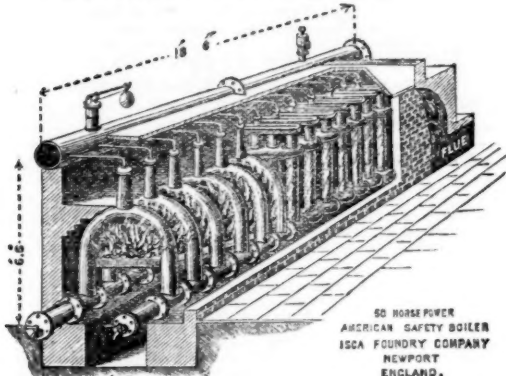
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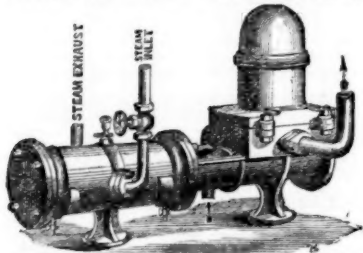
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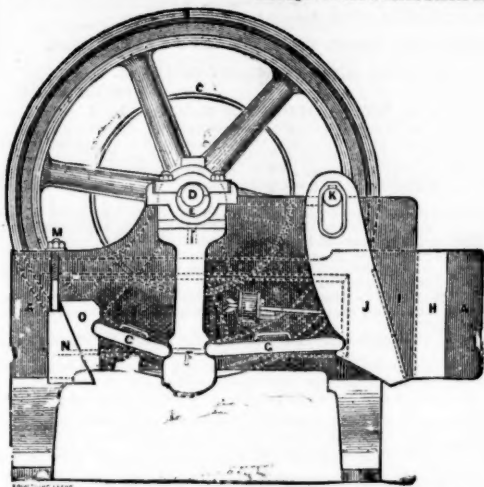
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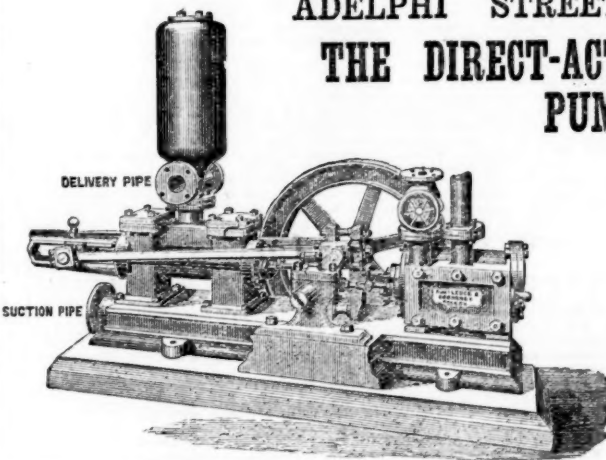
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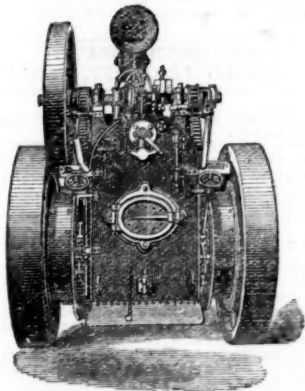
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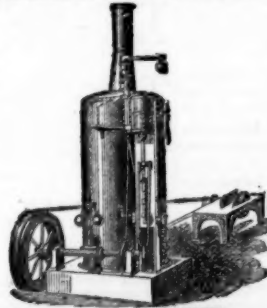
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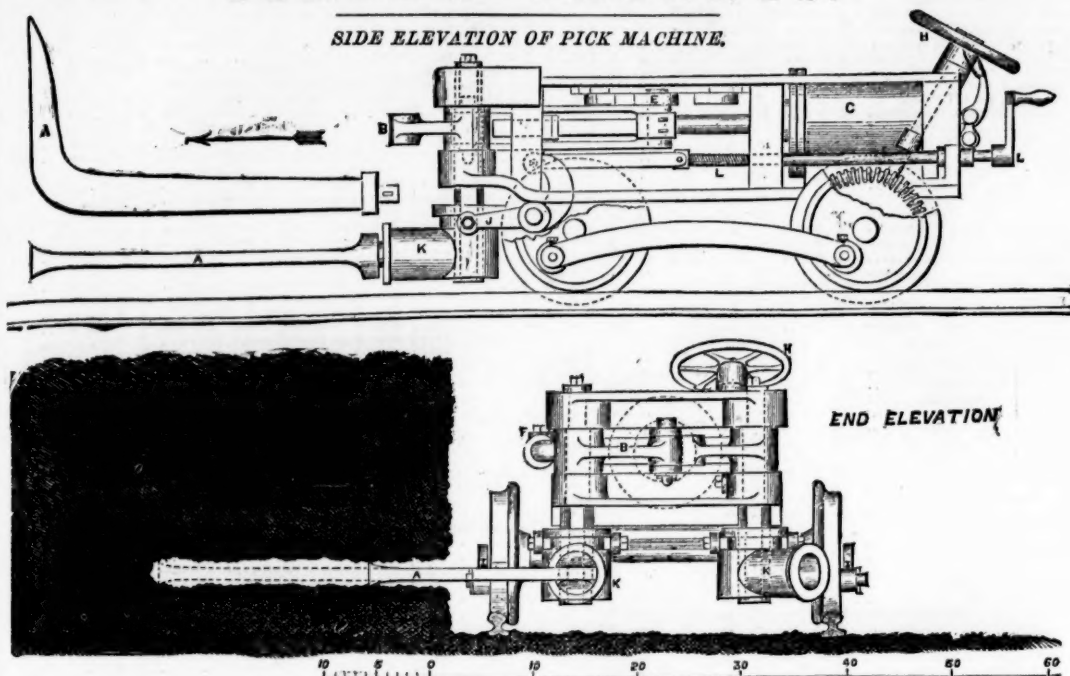
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BRITISH		DIVIDEND		MINES.			
Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid
1500 Alderley Edge, c. Cheshire	10 0 0	—	—	—	10 6 8	0 5 0	Jan. 1869
900 Botallack, f. c. St. Just	91 5 0	230	—	220 230	565 5 0	5 0 0	Feb. 1870
12000 Broadford, f. Cardigan	1 0 0	—	4 1/2	—	1 3 1	0 1 6	Jan. 1870
5094 Bwch Conso., s. i. Cardigan	4 0 0	—	—	3 1/2 3 1/2	0 7 0	0 2 0	Jan. 1870
6400 Cashwell, f. Cumberland	2 10 0	—	—	—	0 9 0	0 2 0	Dec. 1869
916 Cargill, s. i. Newlyn	15 2 7	—	5	5 6	16 15 0	0 10 0	Aug. 1869
1280 Chatterley, f. Flint	0 7 8	—	—	—	0 1 0	0 0 0	Nov. 1868
2450 Cook's Kitchen, c. Illogan	19 14 9	14	—	14 1/2 15 1/2	3 5 0	0 6 0	Jan. 1870
1000 Cornwall Hematite	10 0 0	—	—	—	0 10 0	0 10 0	Feb. 1870
509 Creaghawase and Penkell, f.	7 10 0	—	—	—	2 5 0	1 5 0	April 1868
867 Cwm Erfin, f. Cardiganshire	300 0 0	—	—	—	31 13 0	0 10 0	Jan. 1870
128 Cwmystwith, f. Cardiganshire	600 0 0	—	—	—	327 10 0	2 0 0	July 1869
280 Derwent Mines, s. i. Durham	300 0 0	—	—	—	177 0 0	2 10 0	July 1868
1024 Devon Gl. Conso., c. Tavistock	1 0 0	110	—	95 105	1141 0 0	4 0 0	Jan. 1870
656 Ding Dong, f. Gwulav	4 14 6	13	—	17 19	6 0 0	1 0 0	Dec. 1869
1432 Dolcoath, f. c. Camborne	32 4 6	130	—	132 1/2 137 1/2	255 12 6	2 10 0	Feb. 1870
6144 Drake Wallis, c. Calstock	2 10 0	—	1 1/2	1 1/2 1 1/2	11 6 0	1 0 0	Jan. 1870
300 East Caradon, c. St. Just	32 0 0	—	5 1/2	4 1/2 5	182 10 0	2 0 0	Feb. 1870
6400 East Darren, f. Cardiganshire	32 0 0	—	—	—	19 13 0	0 2 0	Feb. 1870
4400 East Pool, c. f. Pool, Illogan	0 9 9	7	—	7 7 1/2	9 12 0	0 3 3	Mar. 1870
1906 East Wheel Lovell, f. Wendron	3 9 0	27	—	24 1/2 25 1/2	10 16 0	2 0 0	Apr. 1870
2800 Foxdale, f. Isle of Man	25 0 0	—	—	—	74 5 0	0 15 0	Oct. 1869
5000 Frank Mills, f. Christow	3 18 6	—	—	—	4 1 6	0 4 0	Nov. 1869
3250 Gawton, c. Tavistock	3 10 6	—	—	—	0 3 0	0 3 0	Jan. 1868
1000 Great Laxey, f. Isle of Man	4 0 0	18	—	17 18	12 3 0	0 10 0	Mar. 1870
3000 Great Northern Manganese	5 0 0	—	—	—	5 17 0	0 5 0	Feb. 1869
3908 Great Wheel Vor, f. c. Helston	40 0 0	12	—	11 1/2 12 1/2	15 8 0	0 2 6	Mar. 1870
1024 Herodsfoot, f. near Liskeard	8 10 0	42	—	—	62 10 0	1 10 0	Feb. 1870
12000 Holmbush and Kelly Bray, c.	1 0 0	—	—	—	0 3 0	0 1 0	Nov. 1869
1000 Ironmasters' Company	10 0 0	—	—	—	0 9 0	0 9 0	Feb. 1870
5000 Killaloe, f. Tipperary	1 0 0	—	—	—	0 7 0	0 6 0	Mar. 1870
165 Levant, c. f. St. Just	10 8 1	—	—	—	1101 0 0	2 0 0	Aug. 1869
400 Lisburne, f. Cardiganshire	18 15 0	—	—	—	329 0 0	2 0 0	Jan. 1870
4000 Mac-y-Saf, f. Cardigan	30 0 0	—	—	—	4 0 0	0 5 0	Oct. 1868
3000 Mark Valley, c. f. Cardigan	4 10 6	7	—	6 1/2 7	5 17 0	0 4 0	Jan. 1870
1800 Miners Mining Co. f. Wrexham	25 0 0	—	—	—	268 3 3	5 0 0	Feb. 1870
20000 Mining Co. of Ireland, c. f. cl.	7 0 0	8 1/2	—	8 1/2 8 1/2	—	1 1/2 p. c.	Jan. 1870
40000 Mynydd Iron Ore	3 10 0	—	—	—	0 16 6	0 5 0	Jan. 1870
2000 North Levant, f. c. St. Just	10 12 0	11	—	10 1/2 11 1/2	1 5 0	0 10 0	Mar. 1870
2000 Parys Mines, c. Anglesey	50 0 0	—	—	—	162 10 0	2 10 0	Aug. 1868
5000 Penhalls, f. St. Agnes	3 0 0	—	—	—	1 0 6	0 5 0	Jan. 1870
5000 P. conk, f. c. Llanthorne	50 0 0	—	—	—	230 15 0	6 0 0	J. n. 1870
12800 Prince of Wales, c. Calstock	0 12 6	—	—	—	10 10 0	0 1 0	Nov. 1869
11200 Rhydyfelen, c. f. Uby Lelant	10 7 40	—	—	—	97 2 6	1 10 0	Mar. 1870
612 South Caradon, c. St. Cleer	1 0 0	310	—	—	642 10 0	5 0 0	Mar. 1870
6000 South Darren, f. Cardigan	3 6 6	—	1 1/2	1 1/2 1 1/2	1 0 0	0 2 6	Nov. 1869
937 South Wh. Croft, c. Illogan	24 10 10	9 1/2	—	9 1/2 10 1/2	2 10 0	0 10 0	Sept. 1869
496 So. Wh. Frances, c. Illog. f.	18 18 9	9	—	8 9	374 13 6	1 0 0	Mar. 1868
242 Spearhead, f. St. Just	36 17 9	18	—	16 18	12 15 0	1 0 0	Feb. 1870
940 St. Ives Conso., f. St. Ives	10 15 0	10	—	9 10	0 10 0	0 10 0	May 1869
8771 St. Just Amalgamated, f. c.	2 10 0	—	—	—	0 2 6	0 2 6	Nov. 1869
808 Summer Hill, f. Mold	3 18 6	—	—	—	2 3 6	0 5 0	Feb. 1868
6000 Tincroft, c. f. Pool, Illogan	9 0 0	27	—	29 31	23 1 0	1 0 0	Feb. 1870
2000 Trunp Conso., f. Helston	11 10 0	24	—	24 25	10 2 0	0 14 0	Nov. 1869
12000 Van, f. Llanidloes	4 5 0	80	—	75 80	1 10 0	0 10 0	Mar. 1870
3000 W. Chilverton, f. Perranabuloe	10 0 0	67	—	65 67	41 7 6	2 0 0	Feb. 1870
5000 West Godolphin, f. c. Breage	0 1 0	—	—	—	0 3 0	0 1 0	July 1869
2582 West Great Work, f. Breage	8 11 0	—	—	—	0 2 0	0 2 0	June 1869
412 West Wheel Frances, f. Illogan	106 15 0	39	—	38 40	4 10 0	1 10 0	Oct. 1869
500 W. Wheel Scton, c. Camborne	47 0 0	120	—	120 125	652 0 0	4 0 0	Feb. 1870
612 Wheel Bassett, c. Illogan	5 2 6	—	—	—	632 10 0	1 0 0	June 1868
612 Wheel Basset, f. St. Agnes	10 10 0	45	—	44 46	30 10 0	1 10 0	Apr. 1870
4225 Wheel Killy, f. St. Agnes	6 10 6	—	—	—	12 2 6	0 5 0	Feb. 1870
1024 Wheel Killy, f. Uby Lelant	3 10 6	13	—	13 15	12 2 6	0 15 0	Jan. 1870
896 Wheel Margaret, f. Uby Lelant	13 17 6	9	—	7 8	77 5 0	0 10 0	Nov. 1869
1024 Wheel Mary Ann, f. Menheniot	8 0 0	14	—	—	70 7 6	0 10 0	Mar. 1870
10000 Wh. Mary Hutchins, Plym., f.	2 12 6	—	—	—	0 1 0	0 1 0	Aug. 1869
80 Wheel Owles, f. St. Just	70 0 0	—	—	—	429 13 0	5 0 0	Nov. 1869
306 Wheel Scton, c. f. Camborne	58 10 0	30	—	30 35	254 15 0	2 0 0	Feb. 1869
7000 Wicklow, c. f. Wicklow	2 10 0	—	—	—	50 3 0	0 5 0	Sept. 1869